



STIC Search Report

EIC 1700

STIC Database Tracking Number: 214995

TO: Michael Bernshteyn
Location: Remsen 10a34
Art Unit : 1713
February 8, 2007
Phone: 571-272-2411
Serial Number: 10 / 523085

From: Jan Delaval

Location: EIC 1700
Remsen 4a30
Phone: 571-272-2504
jan.delaval@uspto.gov

Search Notes

Access DB# 214995

SEARCH REQUEST FORM

Scientific and Technical Information Center

Requester's Full Name: MICHAEL BERNSTEIN Examiner #: 81515 Date: 01/07/07
Art Unit: 1713 Phone Number 30 272-2411 Serial Number: 10/523,085
Mail Box and Bldg/Room Location: Room 10A34 Results Format Preferred (circle): PAPER DISK E-MAIL

If more than one search is submitted, please prioritize searches in order of need.

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc, if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention: Solid polymer electrolyteInventors (please provide full names): Hiroo Muramoto, Takeshi NitaniEarliest Priority Filing Date: 07/23/2002

For Sequence Searches Only Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.

Please, try to find a copolymer according with limitations of claims 1, 2, 16 and dependable claims 3-15 and 17-25

Thank you

M. Bernstein

SCIENTIFIC REFERENCE BR
Sci & Tech Inf. Ctr.

FEB 7 2007

Pat. & T.M. Office

STAFF USE ONLY

	Type of Search	Vendors and cost where applicable
Searcher: <u>Jan</u>	NA Sequence (#) _____	STN <u>✓</u>
Searcher Phone #: <u>22504</u>	AA Sequence (#) _____	Dialog _____
Searcher Location: _____	Structure (#) <u>✓</u>	Questel/Orbit _____
Date Searcher Picked Up: <u>2/8/07</u>	Bibliographic _____	Dr. Link _____
Date Completed: <u>2/8/07</u>	Litigation _____	Lexis/Nexis _____
Searcher Prep & Review Time: _____	Fulltext _____	Sequence Systems _____
Clerical Prep Time: <u>40</u>	Patent Family _____	WWW/Internet _____
Online Time: <u>410</u>	Other _____	Other (specify) _____

=> fil reg

FILE 'REGISTRY' ENTERED AT 08:21:14 ON 08 FEB 2007

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Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 7 FEB 2007 HIGHEST RN 919834-45-0

DICTIONARY FILE UPDATES: 7 FEB 2007 HIGHEST RN 919834-45-0

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TSCA INFORMATION NOW CURRENT THROUGH June 30, 2006

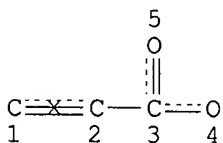
Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

<http://www.cas.org/ONLINE/UG/regprops.html>

=> d sta que l34

L10 170646 SEA FILE=REGISTRY ABB=ON PLU=ON C2H4O OR C3H6O OR C4H8O
 L11 112703 SEA FILE=REGISTRY ABB=ON PLU=ON (75-21-8 OR 25322-68-3 OR
 107-21-1 OR 75-56-9 OR 25322-69-4 OR 57-55-6 OR 504-63-2 OR
 201732-70-9 OR 170678-59-8 OR 26264-14-2 OR 106-88-7 OR
 109-99-9 OR 25190-06-1)/CRN
 L12 22014 SEA FILE=REGISTRY ABB=ON PLU=ON (2163-42-0 OR 110-63-4 OR
 107-88-0 OR 25265-75-2 OR 159806-32-3 OR 168011-04-9 OR
 799775-81-8)/CRN
 L13 76 SEA FILE=REGISTRY ABB=ON PLU=ON (1758-32-3 OR 3266-23-7 OR
 1758-33-4 OR 63864-69-7 OR 21490-63-1)/CRN
 L14 161417 SEA FILE=REGISTRY ABB=ON PLU=ON (L10 OR L11 OR L12 OR L13)
 AND PMS/CI AND NR>=1
 L15 STR



NODE ATTRIBUTES:

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DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

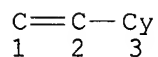
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NUMBER OF NODES IS 5

STEREO ATTRIBUTES: NONE

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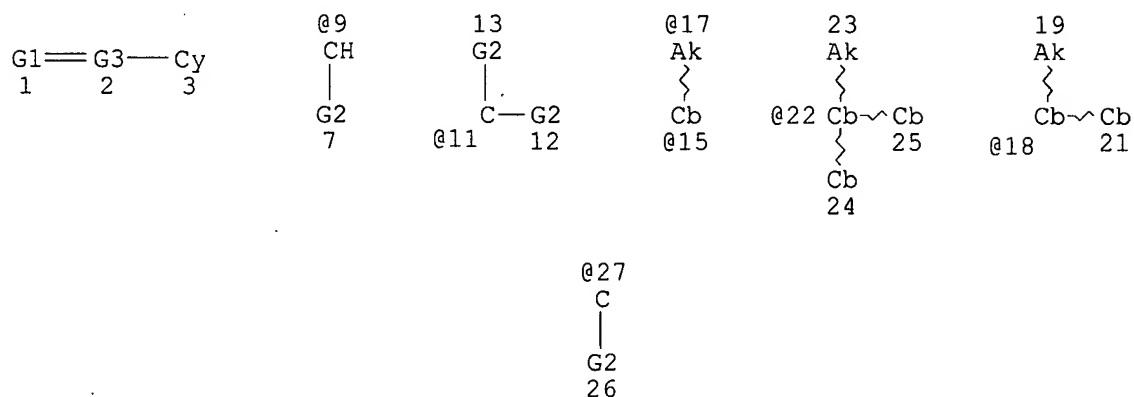
L18 STR



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 DEFAULT ECLEVEL IS LIMITED

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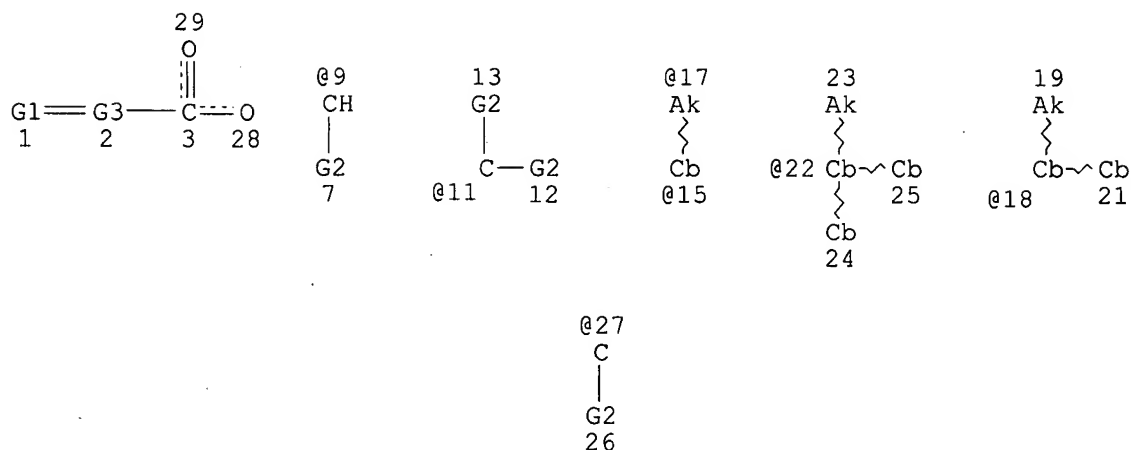
STEREO ATTRIBUTES: NONE
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 L21 STR



VAR G1=CH2/9/11
 VAR G2=AK/CB/17/15/18/22
 VAR G3=CH/27
 NODE ATTRIBUTES:
 DEFAULT MLEVEL IS ATOM
 DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
 RING(S) ARE ISOLATED OR EMBEDDED
 NUMBER OF NODES IS 19

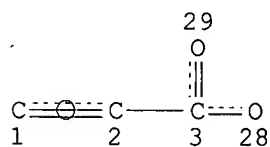
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 L24 STR



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 VAR G3=CH/27
 NODE ATTRIBUTES:
 CONNECT IS M1 RC AT 28
 DEFAULT MLEVEL IS ATOM
 DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
 RING(S) ARE ISOLATED OR EMBEDDED
 NUMBER OF NODES IS 21

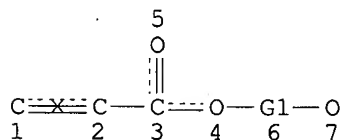
STEREO ATTRIBUTES: NONE
 L26 9174 SEA FILE=REGISTRY SUB=L23 CSS FUL L24
 L27 STR



NODE ATTRIBUTES:
 CONNECT IS M1 RC AT 28
 DEFAULT MLEVEL IS ATOM
 DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
 RING(S) ARE ISOLATED OR EMBEDDED
 NUMBER OF NODES IS 5

STEREO ATTRIBUTES: NONE
 L29 2370 SEA FILE=REGISTRY SUB=L23 SSS FUL L27
 L31 STR



VAR G1=AK/ID
 NODE ATTRIBUTES:
 CONNECT IS M1 RC AT 1
 CONNECT IS M1 RC AT 2
 CONNECT IS M1 RC AT 7
 DEFAULT MLEVEL IS ATOM
 DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
 RING(S) ARE ISOLATED OR EMBEDDED
 NUMBER OF NODES IS 7

STEREO ATTRIBUTES: NONE
 L32 10157 SEA FILE=REGISTRY ABB=ON PLU=ON (L26 OR L29)
 L34 4847 SEA FILE=REGISTRY SUB=L32 CSS FUL L31

100.0% PROCESSED 8893 ITERATIONS 4847 ANSWERS
 SEARCH TIME: 00.00.01

=> d his

(FILE 'HOME' ENTERED AT 06:29:58 ON 08 FEB 2007)
 SET COST OFF

FILE 'HCAPLUS' ENTERED AT 06:30:22 ON 08 FEB 2007

L1 1 S US20050256256/PN OR (US2005-532085# OR WO2003-JP9328 OR JP200
 E MURAMOTO/AU
 E MURAMOTO H/AU
 L2 77 S E3,E17
 E MURAMOTO NAME/AU
 E HIROO/AU
 E MIITANI/AU
 E NIITANI/AU
 L3 10 S E31
 E NITANI/AU
 L4 1 S E25
 E TAKESHI/AU
 L5 4 S E3
 E TAKESHI N/AU
 L6 4 S E9
 L7 3937 S (NIPPON?(L) SODA?)/PA,CS
 SEL RN L1

FILE 'REGISTRY' ENTERED AT 06:33:22 ON 08 FEB 2007

L8 8 S E1-E8
 L9 5 S L8 AND 2/NC AND PMS/CI
 L10 170646 S C2H4O OR C3H6O OR C4H8O
 L11 112703 S (75-21-8 OR 25322-68-3 OR 107-21-1 OR 75-56-9 OR 25322-69-4 O
 L12 22014 S (2163-42-0 OR 110-63-4 OR 107-88-0 OR 25265-75-2 OR 159806-32
 L13 76 S (1758-32-3 OR 3266-23-7 OR 1758-33-4 OR 63864-69-7 OR 21490-6
 L14 161417 S L10-L13 AND PMS/CI AND NR>=1
 L15 STR
 L16 50 S L15 SAM SUB=L14
 L17 78102 S L15 FUL SUB=L14
 L18 STR
 L19 50 S L18 SAM SUB=L17
 L20 14509 S L18 FUL SUB=L17
 SAV TEMP L20 BERNSH523/A

L21 STR L18
 L22 50 S L21 CSS SAM SUB=L20
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 SAV TEMP L23 BERNSH523A/A
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 L26 9174 S L24 CSS FUL SUB=L23
 SAV TEMP L26 BERNSH523B/A
 L27 STR L24
 L28 50 S L27 SAM SUB=L23
 L29 2370 S L27 FUL SUB=L23
 SAV TEMP L29 BERNSH523C/A
 L30 459 S L23 NOT L26,L29
 L31 STR L15
 L32 10157 S L26,L29
 L33 50 S L31 CSS SAM SUB=L32
 L34 4847 S L31 CSS FUL SUB=L32
 SAV TEMP L34 BERNSH523D/A
 L35 3195 S L34 NOT L11-L13
 L36 106 S L35 AND 2/NC
 L37 10 S L36 AND (" (C8H8.(C2H4O)NC6H10O3)X" OR "(C8H8.(C3H6O)NC28H30N4
 L38 4 S L36 AND (FE OR ZR)/ELS
 L39 11 S L36 AND (" (C8H8.(C3H6O)N(C3H6O)N(C3H6O)NC15H20O6)X" OR "(C8H8
 L40 4 S L36 AND (" (C8H8.(C3H6O)N(C3H6O)NC24H30O6S4)X" OR "(C8H8.(C3H6
 L41 79 S L36 NOT L37-L40
 L42 7 S L41 AND (" (C7H7N.(C2H4O)NC8H10O3)X" OR "(C9H10.(C2H4O)N(C2H4
 L43 1 S L41 AND C18H26O6
 L44 3 S L41 AND (" (C8H8.(C2H4O)N(C2H4O)NC21H20O4)X" OR "(C8H8.(C2H4O)
 L45 7 S L41 AND (" (C8H8.(C2H4O)NC11H20O3)X" OR "(C8H8(C2H4O)NC6H6O3)X
 L46 61 S L41 NOT L42-L45
 L47 4 S L46 AND (" (C8H8.(C4H8O)NC8H10O3)X" OR "(C8H8.(C2H4O)NC6H6O3)X
 L48 57 S L46 NOT L47
 L49 370 S L35 AND 3/NC
 L50 1652 S L34 NOT L35
 L51 0 S L50 AND 2/NC
 L52 16 S L50 AND 3/NC
 SEL RN 2 3 10 11 16
 L53 11 S L52 NOT E9-E13
 L54 96 S L50 AND 4/NC
 L55 50 S L54 NOT N/ELS
 L56 45 S L55 NOT OC4/ES
 L57 43 S L56 NOT C6H10O2
 L58 42 S L57 NOT "(C8H8.C7H12O3.C7H12O2.(C2H4O)N(C2H4O)NC23H24O4)X"/MF
 SEL RN 6 8-10 13 20 23-25 29 33 37-39 42
 L59 15 S E14-E28
 L60 84 S L48,L9,L53,L59
 L61 171 S L50 AND 5/NC

FILE 'HCAPLUS' ENTERED AT 08:02:26 ON 08 FEB 2007

L62 246 S L60
 L63 79 S L62 AND PY<=2002 NOT P/DT
 L64 119 S L62 AND (PD<=20020723 OR PRD<=20020723 OR AD<=20020723) AND P
 L65 198 S L63,L64
 L66 11 S L1-L7 AND L62
 E POLYMER ELECTROLYTE/CT
 E E5+ALL
 L67 4300 S E9
 L68 43505 S E7
 L69 13824 S E12+OLD,NT OR E14+OLD,NT
 E E16+ALL

L70 20528 S E8
 E E24+ALL
 E E13+ALL
 L71 17248 S E5,E6
 E BATTERY/CT
 E E9+ALL
 L72 8803 S E2+OLD,NT OR E3+OLD,NT OR E4+OLD,NT
 E BATTERY/CT
 L73 58449 S E4+OLD,NT OR E5+OLD,NT OR E6+OLD,NT OR E7 OR E8+OLD,NT
 E BATTERIES/CT
 E E3+ALL
 L74 120592 S E1 OR E2+OLD,NT OR E3+OLD,NT OR E4+OLD,NT OR E5+OLD,NT
 L75 4 S L65 AND L67-L74
 L76 6 S L65 AND ?ELECTROLYT?
 L77 1 S L65 AND (BATTERY OR FUEL CELL OR ENERG?(L)CONVERT?)
 E IONIC CONDUCT/CT
 L78 19490 S E7+OLD,NT OR E10+OLD,NT OR E11
 L79 2 S L65 AND L78
 L80 18 S L66,L75-L77,L79
 E ELECRODE/CT
 E ELECTRODE/CT
 E E90+ALL
 L81 221163 S E3+NT
 L82 0 S L65 AND L81
 L83 0 S L65 AND ?ELECTROD?
 L84 21 S L64 AND US/PC
 L85 21 S L64 AND US/PRC,AC
 L86 21 S L84,L85
 L87 20 S L86 NOT L80
 L88 1 S L86 AND L80
 L89 18 S L80,L88

FILE 'REGISTRY' ENTERED AT 08:10:05 ON 08 FEB 2007

FILE 'HCAPLUS' ENTERED AT 08:10:05 ON 08 FEB 2007

L90 TRA L89 1- RN : 115 TERMS

FILE 'REGISTRY' ENTERED AT 08:10:06 ON 08 FEB 2007

L91 115 SEA L90
 L92 33 S L91 AND L17
 L93 22 S L92 NOT L60
 SEL RN 2 6 7 9 10 19 22
 L94 15 S L93 NOT E1-E7

FILE 'HCAPLUS' ENTERED AT 08:13:47 ON 08 FEB 2007

L95 TRA L87 1- RN : 201 TERMS

FILE 'REGISTRY' ENTERED AT 08:13:48 ON 08 FEB 2007

L96 201 SEA L95
 L97 42 S L96 AND L17
 L98 39 S L97 NOT L91
 SEL RN 1 5 6 10 11 15 16 18-21 25 26 31 33-36 39
 L99 20 S L98 NOT E8-E26
 L100 3 S L97 NOT L98
 L101 23 S L99,L100

FILE 'HCAPLUS' ENTERED AT 08:19:18 ON 08 FEB 2007

L102 7 S L94 AND L89
 L103 18 S L60 AND L89
 L104 18 S L102,L103

L105 137 S L101
 L106 42 S L105 AND PY<=2002 NOT P/DT
 L107 78 S L105 AND (PD<=20020723 OR PRD<=20020723 OR AD<=20020723) AND
 L108 120 S L106,L107
 L109 22 S L108 AND US/PC,PRC,AC
 L110 40 S L104,L109

FILE 'REGISTRY' ENTERED AT 08:21:14 ON 08 FEB 2007

=> fil hcaplus

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FILE COVERS 1907 - 8 Feb 2007 VOL 146 ISS 7

FILE LAST UPDATED: 7 Feb 2007 (20070207/ED)

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This file contains CAS Registry Numbers for easy and accurate substance identification.

=> d l110 bib abs hitind hitstr retable tot

L110 ANSWER 1 OF 40 HCAPLUS COPYRIGHT 2007 ACS on STN

AN 2006:733246 HCAPLUS

DN 145:168563

TI Polymers for solid polymer electrolytes with good thermal and physical properties and adhesives

IN Niitani, Takeshi; Amaike, Masato; Shimada, Mikiya; Kawamura, Kiyoshi

PA Nippon Soda Co., Ltd., Japan

SO PCT Int. Appl., 53 pp.

CODEN: PIXXD2

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2006077855	A1	20060727	WO 2006-JP300599	20060118
	W:				
	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW:				
	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,				

IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ,
CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH,
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
KG, KZ, MD, RU, TJ, TM

PRAI JP 2005-14195 A 20050121

AB Title polymers comprise a block chain A composed of a random copolymer containing a repeating units [CR1R2CR3CO2(CR4aHCHR4bO)mR5] and CR6R7CR8R9 and a block chain B containing a repeating unit CR10R11CR12R13 in the BAB order, wherein R1,R2, R3, R6, R8, R10, R11, R12 = H or a C1-10 hydrocarbon; R4a, R4b = H or methyl; R5 = H or hydrocarbon; R7 = H, C1-10 hydrocarbon, or OH; R9 = OH, carboxy, or epoxy; R13 = aryl or heteroaryl group; and m = 1-100 integer. Solid polymer electrolytes composition comprise a crosslinked polymer obtained by reacting the polymer with a crosslinking agent and an electrolyte salt. Thus, 30.0 g Blemmer PME 400 and 3.3 g 2-hydroxyethyl methacrylate were polymerized in the presence of dichlorotris(triphenylphosphine)ruthenium, dibutylamine, and 2,2-dichloroacetophenone at 80° for 22 h to give a copolymer with Mn 129,000 and polydispersity 1.37, 20.0 g of which was mixed with 8.6 g styrene and polymerized in the presence of chloropentamethylcyclopentadienylbis(triphenylphosphine)ruthenium and dibutylamine at 100° for 42 h to give a triblock copolymer, 2 g of which was mixed with 0.15 g tolylene-2,4-diisocyanate and 0.15 g lithium hexafluorophosphate in 18 g a solvent mixture, cast into a film, and heated at 60° for 5 h and 100° for 10 h to give a solid polymer electrolyte, showing ionic conductivity 9.4×10^{-6} S/cm at 20° and 9.7×10^{-5} S/cm at 60°.

CC 38-3 (Plastics Fabrication and Uses)

Section cross-reference(s): 52

IT 343978-26-7P 901450-79-1P 901450-80-4P

RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(Blemmer PME 1000, intermediate; polymers for solid polymer electrolytes with good thermal and phys. properties and adhesives)

IT 901450-79-1P 901450-80-4P

RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(Blemmer PME 1000, intermediate; polymers for solid polymer electrolytes with good thermal and phys. properties and adhesives)

RN 901450-79-1 HCAPLUS

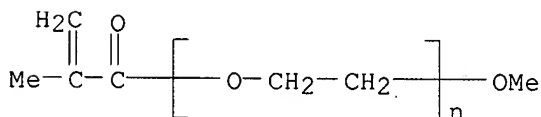
CN 2-Propenoic acid, 2-methyl-, 2-hydroxyethyl ester, polymer with ethenylbenzene and α -(2-methyl-1-oxo-2-propenyl)- ω -methoxypoly(oxy-1,2-ethanediyl), graft, triblock (9CI) (CA INDEX NAME)

CM 1

CRN 26915-72-0

CMF (C2 H4 O)n C5 H8 O2

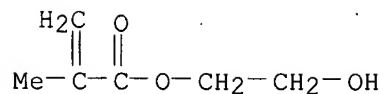
CCI PMS



CM 2

CRN 868-77-9

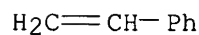
CMF C6 H10 O3



CM 3

CRN 100-42-5

CMF C8 H8



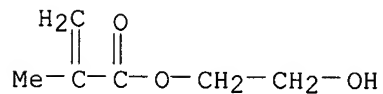
RN 901450-80-4 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-hydroxyethyl ester, polymer with ethenylbenzene and oxirane, graft, triblock (9CI) (CA INDEX NAME)

CM 1

CRN 868-77-9

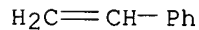
CMF C6 H10 O3



CM 2

CRN 100-42-5

CMF C8 H8



CM 3

CRN 75-21-8

CMF C2 H4 O



RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Nippon Soda Co Ltd	2004			EP 1553117 A1	HCAPLUS
Nippon Soda Co Ltd	2004			WO 2004009663 A1	HCAPLUS
Nippon Soda Co Ltd	2004			JP 2004107641 A	HCAPLUS

Nippon Soda Co Ltd	2004		JP 2004213940 A	HCAPLUS
Nippon Soda Co Ltd	2004		US 2005256256 A1	HCAPLUS
Nippon Soda Co Ltd	2005		WO 2005027144 A1	HCAPLUS
Nippon Soda Co Ltd	2005		JP 2005089510 A	HCAPLUS

L110 ANSWER 2 OF 40 HCAPLUS COPYRIGHT 2007 ACS on STN

AN 2006:632998 HCAPLUS

DN 145:112030

TI Solid polymer electrolyte compositions and solid polymer electrolytes having excellent thermal characteristics, mechanical strength and ion conductivity for electrochemical devices

IN Shintani, Takeshi

PA **Nippon Soda Co., Ltd., Japan**

SO Jpn. Kokai Tokkyo Koho, 34 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	----	-----	-----	-----
PI	JP 2006172822	A	20060629	JP 2004-361520	20041214
PRAI	JP 2004-361520		20041214		

AB Solid polymer electrolyte compns. contain copolymers having repeating unit containing cyclic functional group having ring-opening ability and repeating unit having ion conductive part and electrolytic salts. The cyclic functional group having ring-opening ability is groups having cycloalkane aryl structure, cycloalkadiene aryl structure, cyclobutene aryl structure or cyclobutadiene aryl structure. Solid polymer electrolytes are obtained from the solid polymer electrolyte compns. by ring-opening reaction. The copolymers have number-average mol. weight of 5000-1,000,000 and are coupling-crosslinked to obtain crosslinked polymers. The solid polymer electrolyte compns. are used as electrochem. device materials such as battery, capacitor, sensor, photoelec. conversion device, etc.

CC 72-11 (Electrochemistry)

Section cross-reference(s): 38, 52, 76, 79, 80

IT 92361-49-4P 99717-87-0P **112119-04-7P**

RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(solid polymer electrolyte compns. and solid polymer electrolytes having excellent thermal characteristics, mech. strength and ion conductivity for electrochem. devices)

IT **112119-04-7P**

RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(solid polymer electrolyte compns. and solid polymer electrolytes having excellent thermal characteristics, mech. strength and ion conductivity for electrochem. devices)

RN 112119-04-7 HCAPLUS

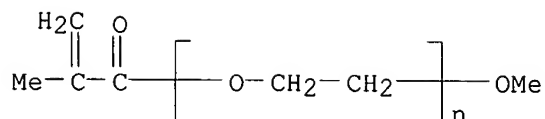
CN Poly(oxy-1,2-ethanediyl), α -(2-methyl-1-oxo-2-propenyl)- ω -methoxy-, polymer with ethenylbenzene, block (9CI) (CA INDEX NAME)

CM 1

CRN 26915-72-0

CMF (C2 H4 O)n C5 H8 O2

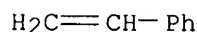
CCI PMS



CM 2

CRN 100-42-5

CMF C8 H8



L110 ANSWER 3 OF 40 HCAPLUS COPYRIGHT 2007 ACS on STN

AN 2006:317430 HCAPLUS

DN 144:353731

TI Polymer electrolyte batteries with electrolytes containing block copolymers

IN Shimada, Mikiya; Amaike, Masato; Shintani, Takeshi; Kawamura, Kiyoshi

PA Nippon Soda Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 40 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2006092792	A	20060406	JP 2004-273632	20040921
PRAI	JP 2004-273632		20040921		

AB The title batteries are equipped with polymer electrolytes containing electrolyte salts and provide voltage resistance ≥ 4.2 V and conductivity at $23^\circ \geq 1 + 10^{-5}$ S/cm. The polymer electrolytes consist of repeating units $\text{CR1R2CR3}[\text{CO}_2(\text{CHR4bCHR4aO})\text{mR5}]$ (I; R1-R3 = H, C1-10 hydrocarbyl; R1 and R3 may be bonded to form a ring; R4a and R4b = H, Me; R5 = H, hydrocarbyl, acyl, silyl; m = 2-100), CR6R7CR8R9 (II; R6-R8 = H, C1-10 hydrocarbyl; R9 = (substituted) aryl), and CR10R11CR12R13 (III; R10-R12 = H, C1-10 hydrocarbyl; R13 = (substituted) aryl, heteroaryl) at mol ratio I/(II + III) 1/30 to 30/1. The polymer electrolytes are suitable for 5 V-class secondary Li batteries.

CC 52-2 (Electrochemical, Radiational, and Thermal Energy Technology)
Section cross-reference(s): 38

IT 697284-07-4DP, lithium complexes

RL: DEV (Device component use); IMF (Industrial manufacture); PREP (Preparation); USES (Uses)

(comb block-containing; polymer electrolyte batteries with electrolytes containing block copolymers)

IT 697284-07-4DP, lithium complexes

RL: DEV (Device component use); IMF (Industrial manufacture); PREP (Preparation); USES (Uses)

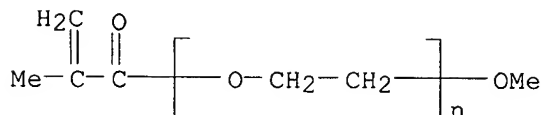
(comb block-containing; polymer electrolyte batteries with electrolytes containing block copolymers)

RN 697284-07-4 HCAPLUS

CN Poly(oxy-1,2-ethanediyl), α -(2-methyl-1-oxo-2-propenyl)- ω -methoxy-, polymer with ethenylbenzene, triblock (9CI) (CA INDEX NAME)

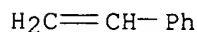
CM 1

CRN 26915-72-0
CMF (C2 H4 O)_n C5 H8 O2
CCI PMS



CM 2

CRN 100-42-5
CMF C8 H8



L110 ANSWER 4 OF 40 HCAPLUS COPYRIGHT 2007 ACS on STN
AN 2006:149532 HCAPLUS
DN 144:233946
TI Multibranched polymers with narrow molecular weight distribution, their manufacture and uses
IN Niitani, Takeshi; Kawamura, Kiyoshi; Shirai, Akihiro
PA Nippon Soda Co., Ltd., Japan
SO PCT Int. Appl., 128 pp.
CODEN: PIXXD2
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2006016665	A1	20060216	WO 2005-JP14788	20050811
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
PRAI JP 2004-235855	A	20040813		
JP 2004-368908	A	20041221		
JP 2005-24232	A	20050131		
AB The invention relates to multibranched polymers represented by AR1aR2b-a (A = organic groups with b valency; R1 = XnYQ where X = group 14-16 element-containing bridge; Y = groups can bear active halogen atoms; Q = polymer chains derived from unsatd. compound polymerization; n = 0 or ≥1; R2 = organic groups inert to polymerization; a = number of R1 chains introduced on A; b = valency of A). The polymers can be prepared by using a core compound which				

has multiple polymerization initiation sites and the living radical polymerization of unsatd. monomers. Thus, reacting 1,1,2,2-tetrakis(4-hydroxyphenyl)ethane with 2-bromoisobutyric acid gave a multiple-site initiator on which Me methacrylate was polymerized to give a multibranched polymer.

CC 37-3 (Plastics Manufacture and Processing)
Section cross-reference(s): 52

IT 876347-68-1P 876347-68-1P 876368-09-1P
876368-09-1P
RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(multibranched polymers with narrow mol. weight distribution, their manufacture and use in polymer electrolytes or adhesives)

IT 7439-93-2DP, Lithium, macromer polymer complexes 9003-53-6P, Polystyrene 9011-14-7P, Methyl methacrylate polymer 87105-87-1P, Polyethylene glycol monomethacrylate methyl ether homopolymer 186454-05-7P, tert-Butyl acrylate-methyl acrylate copolymer 697291-45-5DP, lithium complex, perchlorate-containing 731852-85-ODP, Blemmer PME 400-styrene diblock copolymer, lithium complex, perchlorate-containing
RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(multibranched; multibranched polymers with narrow mol. weight distribution, their manufacture and use in polymer electrolytes or adhesives)

IT 343978-14-3P 343978-26-7P
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(multibranched; multibranched polymers with narrow mol. weight distribution, their manufacture and use in polymer electrolytes or adhesives)

IT 876347-68-1P 876368-09-1P
RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(multibranched polymers with narrow mol. weight distribution, their manufacture and use in polymer electrolytes or adhesives)

RN 876347-68-1 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-hydroxyethyl ester, polymer with ethenylbenzene and oxirane, methyl ether, block, graft (9CI) (CA INDEX NAME)

CM 1

CRN 67-56-1

CMF C H4 O

H₃C-OH

CM 2

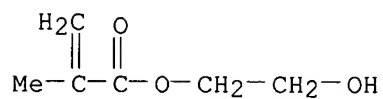
CRN 876347-67-0

CMF (C8 H8 . C6 H10 O3 . C2 H4 O)x

CCI PMS

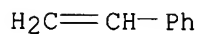
CM 3

CRN 868-77-9
CMF C6 H10 O3



CM 4

CRN 100-42-5
CMF C8 H8



CM 5

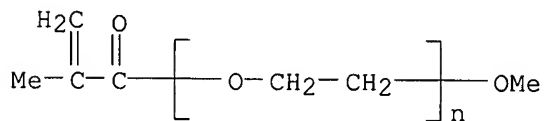
CRN 75-21-8
CMF C2 H4 O



RN 876368-09-1 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 2-hydroxyethyl ester, polymer with
ethenylbenzene and α -(2-methyl-1-oxo-2-propenyl)- ω -
methoxypoly(oxy-1,2-ethanediyl), block, graft (9CI) (CA INDEX NAME)

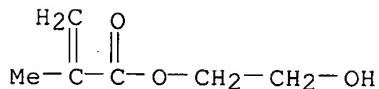
CM 1

CRN 26915-72-0
CMF (C2 H4 O)_n C5 H8 O2
CCI PMS



CM 2

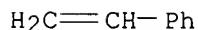
CRN 868-77-9
CMF C6 H10 O3



CM 3

CRN 100-42-5

CMF C8 H8



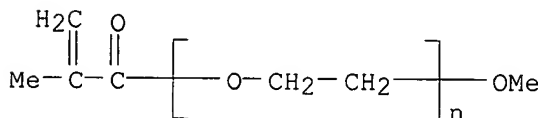
IT. **731852-85-0DP**, Blemmer PME 400-styrene diblock copolymer, lithium complex, perchlorate-containing
 RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
 (multibranched; multibranched polymers with narrow mol. weight distribution, their manufacture and use in polymer electrolytes or adhesives)
 RN 731852-85-0 HCAPLUS
 CN Poly(oxy-1,2-ethanediyl), α -(2-methyl-1-oxo-2-propenyl)- ω -methoxy-, polymer with ethenylbenzene, diblock (9CI) (CA INDEX NAME)

CM 1

CRN 26915-72-0

CMF (C2 H4 O)_n C5 H8 O2

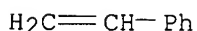
CCI PMS



CM 2

CRN 100-42-5

CMF C8 H8



IT **343978-14-3P**
 RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
 (multibranched; multibranched polymers with narrow mol. weight distribution, their manufacture and use in polymer electrolytes or adhesives)
 RN 343978-14-3 HCAPLUS
 CN 2-Propenoic acid, 2-methyl-, 2-hydroxyethyl ester, polymer with oxirane, methyl ether, graft (9CI) (CA INDEX NAME)

CM 1

CRN 67-56-1

CMF C H4 O

$\text{H}_3\text{C}-\text{OH}$

CM 2

CRN 229647-70-5

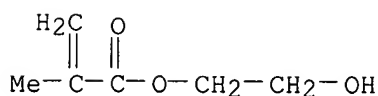
CMF (C6 H10 O3 . C2 H4 O)x

CCI PMS

CM 3

CRN 868-77-9

CMF C6 H10 O3



CM 4

CRN 75-21-8

CMF C2 H4 O



RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Nippon Soda Co Ltd	2002			JP 200220479 A	
Nippon Soda Co Ltd	2004			JP 2004107641 A	HCAPLUS
Nippon Soda Co Ltd	2004			JP 2004189664 A	HCAPLUS
Nippon Soda Co Ltd	2004			WO 20049663 A1	
Sekisui Chemical Co Ltd	1992			JP 04-363306 A	HCAPLUS
Sekisui Chemical Co Ltd	1992			EP 464408 A1	HCAPLUS
Sekisui Chemical Co Ltd	1992			US 5102966 A	HCAPLUS

L110 ANSWER 5 OF 40 HCAPLUS COPYRIGHT 2007 ACS on STN

AN 2005:1102873 HCAPLUS

DN 143:389768

TI Solid polymer electrolyte batteries with good cycle efficiency

IN Kawamura, Kiyoshi; Shimada, Mikiya; Shintani, Takeshi

 PA **Nippon Soda Co., Ltd., Japan**

SO Jpn. Kokai Tokkyo Koho, 47 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2005285332	A	20051013	JP 2004-68707	20040311
PRAI	JP 2004-56493	A	20040301		

AB The batteries have (A) solid polymer electrolytes containing (a) crosslinked

products of copolymers having repeating units of [CR1R2CR3CO2(CR4aHCR4bHO)mR5] (R1-R3 = H, C1-10 hydrocarbon group; R4a, R4b = H, Me; R5 = H, hydrocarbon group, acyl, silyl; m = 1-100) and (CR6R7CR8R9) (R6, R8 = H, C1-10 hydrocarbon group; R7 = H, C1-10 hydrocarbon group, OH, etc.; R9 = OH, carboxyl, epoxy, etc.), and crosslinking agents, and (b) electrolyte salts, and (B) electrodes containing active mass and block copolymers having blocks of [CR1aR2aCR3aCO2(CR4b1HCR4a1HO)m1R5a] (R1a-R3a = H, C1-10 hydrocarbon group; R4a1, R4b1 = H, Me; R5a = H, hydrocarbon group, acyl, silyl; m1 = 2-100) sandwiched between blocks of (CR6aR7aCR8aR9a) (R6a-R8a = H, C1-10 hydrocarbon group; R9a = aryl). The batteries, having crosslinked ion-conductive copolymers in electrolytes and noncrosslinked ion-conductive copolymers containing same repeating units to the electrolyte copolymers in electrodes, show good discharge capacity and charge-discharge efficiency.

IC ICM H01M0010-40

ICS C08F0297-02

CC 52-2 (Electrochemical, Radiational, and Thermal Energy Technology)

Section cross-reference(s): 38

IT **697284-07-4DP**, lithium complex

RL: DEV (Device component use); IMF (Industrial manufacture); PREP

(Preparation); USES (Uses)

(comb structure-containing, electrode component; solid polymer electrolyte batteries with good cycle efficiency)

IT **849950-63-6P**

RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT

(Reactant or reagent)

(comb structure-containing; solid polymer electrolyte batteries with good cycle efficiency)

IT **697284-07-4DP**, lithium complex

RL: DEV (Device component use); IMF (Industrial manufacture); PREP

(Preparation); USES (Uses)

(comb structure-containing, electrode component; solid polymer electrolyte batteries with good cycle efficiency)

RN 697284-07-4 HCAPLUS

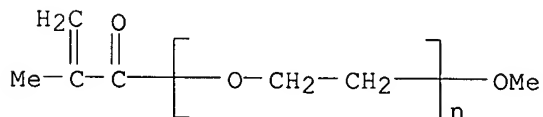
CN Poly(oxy-1,2-ethanediyl), α -(2-methyl-1-oxo-2-propenyl)- ω -methoxy-, polymer with ethenylbenzene, triblock (9CI) (CA INDEX NAME)

CM 1

CRN 26915-72-0

CMF (C2 H4 O)n C5 H8 O2

CCI PMS



CM 2

CRN 100-42-5

CMF C8 H8



IT 849950-63-6P

RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)

(comb structure-containing; solid polymer electrolyte batteries with good cycle efficiency)

RN 849950-63-6 HCAPLUS

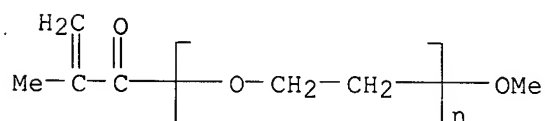
CN 2-Propenoic acid, 2-hydroxyethyl ester, polymer with ethenylbenzene and α -(2-methyl-1-oxo-2-propenyl)- ω -methoxypoly(oxy-1,2-ethanediyl), pentablock (9CI) (CA INDEX NAME)

CM 1

CRN 26915-72-0

CMF (C2 H4 O)_n C5 H8 O2

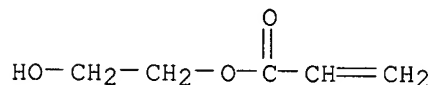
CCI PMS



CM 2

CRN 818-61-1

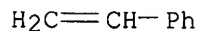
CMF C5 H8 O3



CM 3

CRN 100-42-5

CMF C8 H8



L110 ANSWER 6 OF 40 HCAPLUS COPYRIGHT 2007 ACS on STN

AN 2005:1002575 HCAPLUS

DN 144:394494

TI Characteristics of new-type solid polymer electrolyte controlling nano-structure

AU Niitani, Takeshi; Shimada, Mikiya; Kawamura, Kiyoshi; Kanamura, Kiyoshi

CS Nippon Soda Co. Ltd., Ichihara, Chiba, 290-0045, Japan

SO Journal of Power Sources (2005), 146(1-2), 386-390

CODEN: JPSODZ; ISSN: 0378-7753

PB Elsevier B.V.

DT Journal

LA English

AB High ionic conductivity and good mech. properties are needed for solid polymer electrolytes (SPEs) used in solid-state Li polymer batteries. A solid polymer electrolyte with a micro phase separation structure was synthesized and its electrochem. characteristics were studied. The highest value of ionic conductivity was obtained at a concentration of 5 mol% Li salt per ethylene oxide unit.

The ionic conductivity of this SPE was 2×10^{-4} S/cm at 30°. A solid-state Li polymer battery with a composite cathode, Li/SPE/LiCoO₂, had good charge/discharge characteristics and retained a discharge capacity of 100 mA-h/g after 100 cycles at room temperature. This SPE was electrochem. stable and did not decompose up to 4.5 V.

CC 52-2 (Electrochemical, Radiational, and Thermal Energy Technology)
Section cross-reference(s): 38

IT 112119-04-7P

RL: DEV (Device component use); PNU (Preparation, unclassified); PREP (Preparation); USES (Uses)

(preparation of solid polymer electrolyte with controlled nanostructure for lithium batteries)

IT 112119-04-7P

RL: DEV (Device component use); PNU (Preparation, unclassified); PREP (Preparation); USES (Uses)

(preparation of solid polymer electrolyte with controlled nanostructure for lithium batteries)

RN 112119-04-7 HCAPLUS

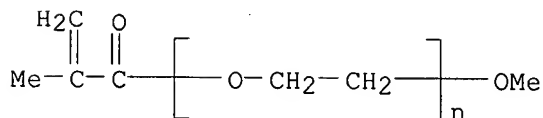
CN Poly(oxy-1,2-ethanediyl), α -(2-methyl-1-oxo-2-propenyl)- ω -methoxy-, polymer with ethenylbenzene, block (9CI) (CA INDEX NAME)

CM 1

CRN 26915-72-0

CMF (C2 H4 O)_n C5 H8 O2

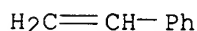
CCI PMS



CM 2

CRN 100-42-5

CMF C8 H8



RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Armand, M	1979		131	Fast Ion Transport i	HCAPLUS
Kamigaito, M	2001	101	3689	Chem Rev	HCAPLUS
Khan, I	1989	190	1069	Makromol Chem	HCAPLUS
Matsui, S	2001	97-98	772	J Power Sources	HCAPLUS
Ruzette, A	2001	148	A537	J Electrochem Soc	HCAPLUS
Sadoway, D	2001	97-98	621	J Power Sources	HCAPLUS

Trapa, P	2002 5	A85	Electrochem Solid-St HCAPLUS
Watanabe, M	1999 81-82 786	J Power Sources	HCAPLUS

L110 ANSWER 7 OF 40 HCAPLUS COPYRIGHT 2007 ACS on STN

AN 2005:967129 HCAPLUS

DN 144:372906

TI Synthesis of Li⁺ ion conductive PEO-PSt block copolymer electrolyte with microphase separation structure

AU **Niitani, Takeshi**; Shimada, Mikiya; Kawamura, Kiyoshi; Dokko, Kaoru; Rho, Young-Ho; Kanamura, Kiyoshi

CS **Nippon Soda Company Limited, Ichihara, Chiba, 290-0045, Japan**

SO Electrochemical and Solid-State Letters (2005), 8(8), A385-A388
CODEN: ESLEF6; ISSN: 1099-0062

PB Electrochemical Society

DT Journal

LA English

AB A block copolymer of polyethylene oxide (PEO) and polystyrene (PSt) was used for the preparation of a microphase-separated solid polymer electrolyte containing

LiClO₄. This electrolyte had an ionic conductivity at room temperature of >10⁻⁴ S/cm.

The polystyrene block provided the mech. strength and the polyethylene oxide component allowed fast ion conduction in the electrolyte without any plasticizer. A LiCoO₂/polymer electrolyte/Li cell was constructed and the cell had a discharge capacity of 100 mA-h/g at 30°.

CC 52-2 (Electrochemical, Radiational, and Thermal Energy Technology)
Section cross-reference(s): 38, 72

IT **112119-04-7DP**, lithium complexes

RL: DEV (Device component use); SPN (Synthetic preparation); PREP (Preparation); USES (Uses)

(synthesis of Li⁺-conductive PEO-polystyrene block copolymer electrolyte with microphase separation structure for lithium batteries)

IT **112119-04-7DP**, lithium complexes

RL: DEV (Device component use); SPN (Synthetic preparation); PREP (Preparation); USES (Uses)

(synthesis of Li⁺-conductive PEO-polystyrene block copolymer electrolyte with microphase separation structure for lithium batteries)

RN 112119-04-7 HCAPLUS

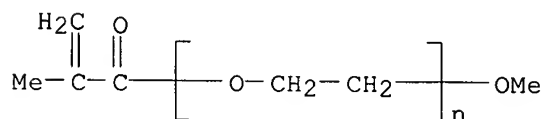
CN Poly(oxy-1,2-ethanediyl), α-(2-methyl-1-oxo-2-propenyl)-ω-methoxy-, polymer with ethenylbenzene, block (9CI) (CA INDEX NAME)

CM 1

CRN 26915-72-0

CMF (C2 H4 O)_n C5 H8 O2

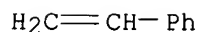
CCI PMS



CM 2

CRN 100-42-5

CMF C8 H8



RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Angell, C	1993	362	137	Nature (London)	HCAPLUS
Armand, M	1979		131	Fast Ion Transport i	HCAPLUS
Bruce, P	1995			Solid State Electroc	
Croce, F	1998	394	456	Nature (London)	HCAPLUS
Gadjourova, Z	2001	412	520	Nature (London)	HCAPLUS
Gray, F	1988	21	392	Macromolecules	HCAPLUS
Hall, P	1986	27	98	Polym Commun	HCAPLUS
Kamigaito, M	2001	101	3689	Chem Rev (Washington	HCAPLUS
Khan, I	1989	190	1069	Makromol Chem	HCAPLUS
Le Nest, J	1992	37	1585	Electrochim Acta	HCAPLUS
Matsui, S	2001	97-98	772	J Power Sources	HCAPLUS
Niitani, T				J Power Sources, In	
Nishimoto, A	1999	32	1541	Macromolecules	HCAPLUS
Persi, L	2002	149	A212	J Electrochem Soc	HCAPLUS
Ruzette, A	2001	148	A537	J Electrochem Soc	HCAPLUS
Sadoway, D	2001	97-98	621	J Power Sources	HCAPLUS
Soo, P	1999	146	32	J Electrochem Soc	HCAPLUS
Trapa, P	2002	5	A85	Electrochem Solid-St	HCAPLUS
Wang, C	2003	150	A1166	J Electrochem Soc	HCAPLUS
Watanabe, M	1999	81-82	786	J Power Sources	HCAPLUS
Wright, P	2002	27	597	MRS Bull	HCAPLUS
Wright, P	1998	47	34	Polym Int	HCAPLUS
Xia, Y	2001	92	234	J Power Sources	HCAPLUS

L110 ANSWER 8 OF 40 HCAPLUS COPYRIGHT 2007 ACS on STN

AN 2005:612574 HCAPLUS

DN 143:136276

TI Polymer solid electrolytes for batteries

IN Shimada, Mikiya; Niitani, Takeshi

PA Nippon Soda Co., Ltd., Japan

SO PCT Int. Appl., 33 pp.

CODEN: PIXXD2

DT Patent

LA Japanese

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2005064620	A1	20050714	WO 2004-JP19710	20041222
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				

PRAI JP 2003-430626 A 20031225

JP 2004-296309 A 20041008

AB Disclosed is a polymer solid electrolyte having both excellent ion conductivity

and shape stability. A polymer solid electrolyte was characterized by containing a polymer having an ion-conducting region, an additive having at least one chemical bond selected from the group consisting of urethane bond, thiourethane bond, ureide bond, imide bond and amide bond in a mol., and an electrolyte salt.

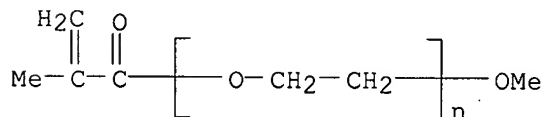
IC ICM H01B0001-06
ICS C08K0003-00; C08K0005-00; C08L0053-00; C08L0055-00; H01M0010-40
CC 52-2 (Electrochemical, Radiational, and Thermal Energy Technology)
Section cross-reference(s): 35
IT 9081-45-2P, Styrene-methyl polyethylene glycol monomethacrylate copolymer 858181-45-0P, Styrene-2-hydroxyethyl acrylate-polyethylene glycol monomethacrylate methyl ether copolymer
RL: DEV (Device component use); PNU (Preparation, unclassified); PREP (Preparation); USES (Uses)
(polymer solid electrolytes for batteries)
IT 9081-45-2P, Styrene-methyl polyethylene glycol monomethacrylate copolymer 858181-45-0P, Styrene-2-hydroxyethyl acrylate-polyethylene glycol monomethacrylate methyl ether copolymer
RL: DEV (Device component use); PNU (Preparation, unclassified); PREP (Preparation); USES (Uses)
(polymer solid electrolytes for batteries)
RN 9081-45-2 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), α -(2-methyl-1-oxo-2-propenyl)- ω -methoxy-, polymer with ethenylbenzene (9CI) (CA INDEX NAME)

CM 1

CRN 26915-72-0

CMF (C2 H4 O)_n C5 H8 O2

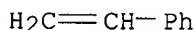
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CM 2

CRN 100-42-5

CMF C8 H8



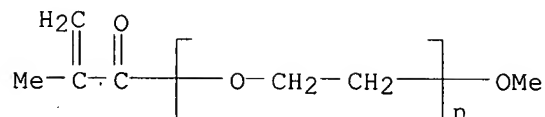
RN 858181-45-0 HCAPLUS
CN 2-Propenoic acid, 2-hydroxyethyl ester, polymer with ethenylbenzene and α -(2-methyl-1-oxo-2-propenyl)- ω -methoxypoly(oxy-1,2-ethanediyl) (9CI) (CA INDEX NAME)

CM 1

CRN 26915-72-0

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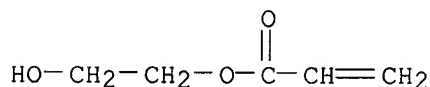
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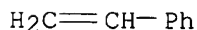
CMF C5 H8 O3



CM 3

CRN 100-42-5

CMF C8 H8



RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Hitachi Chemical Co Ltd	2001			JP 200143731 A	
Sanyo Chemical Industri	2003			JP 2003257491 A	HCAPLUS

L110 ANSWER 9 OF 40 HCAPLUS COPYRIGHT 2007 ACS on STN

AN 2005:497332 HCAPLUS

DN 143:35168

TI Water-developable infrared-sensitive printing plate

IN Munnelly, Heidi M.; Wieland, Kevin; Ray, Kevin Barry

PA Kodak Polychrome Graphics LLC, USA

SO U.S. Pat. Appl. Publ., 14 pp., Cont.-in-part of U.S. Ser. No. 891,727.

CODEN: USXXCO

DT Patent

LA English

FAN.CNT 7

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2005123853	A1	20050609	US 2004-13954	20041216 <--
	US 2003064318	A1	20030403	US 2002-119454	20020410 <--
	US 6899994	B2	20050531		
	US 2005003285	A1	20050106	US 2004-872209	20040617 <--
	US 2004260050	A1	20041223	US 2004-891727	20040715 <--
	US 7172850	B2	20070206		
PRAI	US 2002-119454	A2	20020410	<--	
	US 2004-872209	A2	20040617	<--	
	US 2004-891727	A2	20040715	<--	
	US 2001-826300	A2	20010404	<--	
	US 2004-813221	A2	20040330	<--	
	US 2004-842111	A2	20040510	<--	

AB The present invention provides an imageable element including a lithog. substrate and an imageable layer disposed on the substrate. The imageable layer includes a radically polymerizable component, an initiator system capable of generating radicals sufficient to initiate a polymerization reaction upon exposure to imaging radiation, and a polymeric binder having a hydrophobic backbone and including constitutional units having a pendant group including a hydrophilic poly(alkylene oxide) segment. The imageable element can be developed using an aqueous developer solution. Alternatively, the imageable element can be developed on-press by contact with ink and/or fountain solution.

IC ICM G03C0001-76

INCL 430270100

CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 35, 38

IT **9081-45-2P**, Poly(ethylene glycol)methyl ether methacrylate-styrene copolymer
RL: PRP (Properties); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(water-developable IR-sensitive printing plate)

IT **9081-45-2P**, Poly(ethylene glycol)methyl ether methacrylate-styrene copolymer
RL: PRP (Properties); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(water-developable IR-sensitive printing plate)

RN 9081-45-2 HCAPLUS

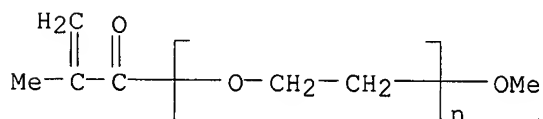
CN Poly(oxy-1,2-ethanediyl), α -(2-methyl-1-oxo-2-propenyl)- ω -methoxy-, polymer with ethenylbenzene (9CI) (CA INDEX NAME)

CM 1

CRN 26915-72-0

CMF (C2 H4 O)_n C5 H8 O2

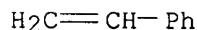
CCI PMS



CM 2

CRN 100-42-5

CMF C8 H8



L110 ANSWER 10 OF 40 HCAPLUS COPYRIGHT 2007 ACS on STN

AN 2005:323497 HCAPLUS

DN 142:395064

TI Polymer solid electrolytic electric battery, electrode and those production methods

IN Kanamura, Kiyoshi; Kawamura, Kiyoshi; Shintani, Takeshi; Shimada, Mikiya;

Aoyagi, Koichiro
 PA **Nippon Soda Co., Ltd., Japan**
 SO Jpn. Kokai Tokkyo Koho, 40 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 FAN.CNT 1

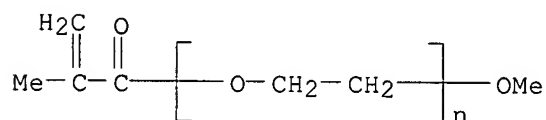
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2005100966	A	20050414	JP 2004-240036	20040819
PRAI	JP 2003-295880	A	20030820		
AB	The disclosed battery contains polymer electrolyte comprising block copolymer having ethylene glycol derivative-acrylic acid derivative ester polymer block, and vinyl polymer block(s). The disclosed electrodes for the battery contains electrode active substance, an electrolyte salt, and the block copolymer. Fabrication process for the battery is also disclosed. The polymer electrolyte has excellent thermal stability, phys. properties, and ion conductivity				
IC	ICM H01M0010-40 ICS C08F0293-00; H01B0001-06; H01M0004-02; H01M0004-04; H01M0004-60				
CC	52-2 (Electrochemical, Radiational, and Thermal Energy Technology)				
IT	697284-07-4P 849950-63-6P RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (polymer electrolytes for lithium batteries)				
IT	697284-07-4P 849950-63-6P RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (polymer electrolytes for lithium batteries)				
RN	697284-07-4 HCAPLUS				
CN	Poly(oxy-1,2-ethanediyl), α -(2-methyl-1-oxo-2-propenyl)- ω -methoxy-, polymer with ethenylbenzene, triblock (9CI) (CA INDEX NAME)				

CM 1

CRN 26915-72-0

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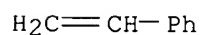
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CM 2

CRN 100-42-5

CMF C8 H8



RN 849950-63-6 HCAPLUS

CN 2-Propenoic acid, 2-hydroxyethyl ester, polymer with ethenylbenzene and α -(2-methyl-1-oxo-2-propenyl)- ω -methoxypoly(oxy-1,2-

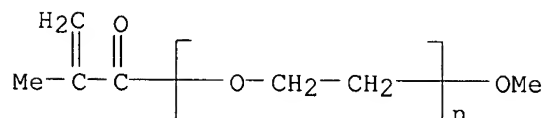
ethanediyl), pentablock (9CI) (CA INDEX NAME)

CM 1

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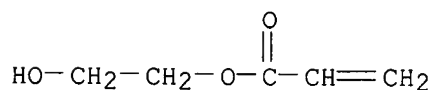
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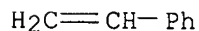
CMF C5 H8 O3



CM 3

CRN 100-42-5

CMF C8 H8



L110 ANSWER 11 OF 40 HCAPLUS COPYRIGHT 2007 ACS on STN

AN 2005:260319 HCAPLUS

DN 142:339051

TI Composition for polymer solid electrolyte, polymer solid electrolyte, polymer solid electrolyte battery, ion-conductive membrane, copolymer and process for producing the copolymer

IN **Muramoto, Hiroo; Niitani, Takeshi; Aoyagi, Koichiro**

PA **Nippon Soda Co., Ltd., Japan**

SO PCT Int. Appl., 128 pp.

CODEN: PIXXD2

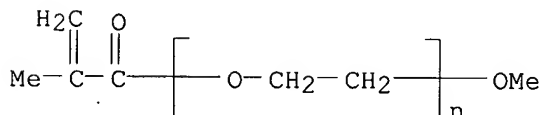
DT Patent

LA Japanese

FAN.CNT 1

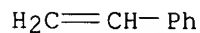
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005027144	A1	20050324	WO 2004-JP576	20040123
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RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ,
 BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE,
 ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK,
 TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
 JP 2005089510 A 20050407 JP 2003-321155 20030912
 EP 1667168 A1 20060607 EP 2004-704735 20040123
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
 IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK
 CN 1849674 A 20061018 CN 2004-80025920 20040123
 PRAI JP 2003-321155 A 20030912
 WO 2004-JP576 W 20040123
 AB Polymer solid electrolytes excelling in thermal properties, phys.
 properties and ion conductivity and being close to practical level for use in
 batteries are disclosed. In particular, a composition for polymer solid
 electrolyte characterized in that the composition contains a copolymer and an
 electrolyte salt, the copolymer having repeating units of the formula:
 [CR1R2CR3CO2(CHR4aCHR4bO)mR5] (R1, R2, R3 = H, C1-C10 hydrocarbyl; R4a,
 R4b = H, Me; Me; R5 = H, hydrocarbyl, acyl, silyl; and m is an integer of
 1 to 100) and repeating units of the formula: CR6R7CR8R9 (R6, R7, R8 = H,
 C1-C10 hydrocarbyl; R9 = an organic group having at least one functional
 group selected from hydroxyl, carboxyl, epoxy, an acid anhydride group and
 amino).
 IC ICM H01B0001-06
 ICS C08L0033-14; C08L0053-00; C08F0297-00; H01M0006-18; H01M0010-40;
 H01M0004-60
 CC 52-2 (Electrochemical, Radiational, and Thermal Energy Technology)
 Section cross-reference(s): 35
 IT 697284-07-4P 848439-41-8DP, desilylated 848439-42-9DP,
 desilylated 848439-43-ODP, deethylated 848439-44-1DP,
 debutylated 848442-02-4DP, desilylated 848442-03-5P
 849950-63-6P 877834-07-6P 877837-29-1DP,
 desilylated
 RL: SPN (Synthetic preparation); TEM (Technical or engineered material
 use); PREP (Preparation); USES (Uses)
 (polymer electrolyte compns. containing)
 IT 697284-07-4P 848439-41-8DP, desilylated
 848439-43-ODP, deethylated 848439-44-1DP, debutylated
 848442-03-5P 849950-63-6P 877834-07-6P
 877837-29-1DP, desilylated
 RL: SPN (Synthetic preparation); TEM (Technical or engineered material
 use); PREP (Preparation); USES (Uses)
 (polymer electrolyte compns. containing)
 RN 697284-07-4 HCAPLUS
 CN Poly(oxy-1,2-ethanediyl), α -(2-methyl-1-oxo-2-propenyl)- ω -
 methoxy-, polymer with ethenylbenzene, triblock (9CI) (CA INDEX NAME)
 CM 1
 CRN 26915-72-0
 CMF (C2 H4 O)n C5 H8 O2
 CCI PMS



CM 2

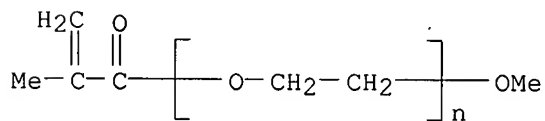
CRN 100-42-5
CMF C8 H8



RN 848439-41-8 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 2-[(trimethylsilyl)oxy]ethyl ester, polymer with ethenylbenzene and α -(2-methyl-1-oxo-2-propenyl)- ω -methoxypoly(oxy-1,2-ethanediyl), triblock (9CI) (CA INDEX NAME)

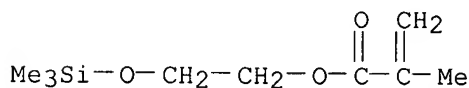
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CRN 26915-72-0
CMF (C2 H4 O)_n C5 H8 O2
CCI PMS



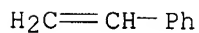
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CRN 17407-09-9
CMF C9 H18 O3 Si



CM 3

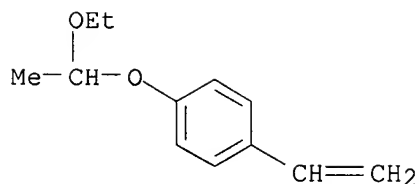
CRN 100-42-5
CMF C8 H8



RN 848439-43-0 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), α -(2-methyl-1-oxo-2-propenyl)- ω -methoxy-, polymer with ethenylbenzene and 1-ethenyl-4-(1-ethoxyethoxy)benzene, triblock (9CI) (CA INDEX NAME)

CM 1

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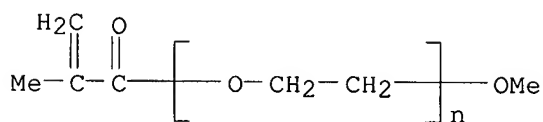


CM 2

CRN 26915-72-0

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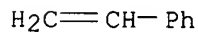
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CM 3

CRN 100-42-5

CMF C8 H8



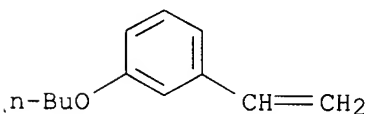
RN 848439-44-1 HCAPLUS

CN Poly(oxy-1,2-ethanediyl), α -(2-methyl-1-oxo-2-propenyl)- ω -methoxy-, polymer with 1-butoxy-3-ethenylbenzene and ethenylbenzene, block, graft (9CI) (CA INDEX NAME)

CM 1.

CRN 156660-60-5

CMF C12 H16 O

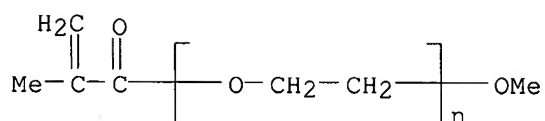


CM 2

CRN 26915-72-0

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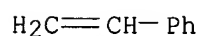
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CM 3

CRN 100-42-5

CMF C8 H8



RN 848442-03-5 HCAPLUS

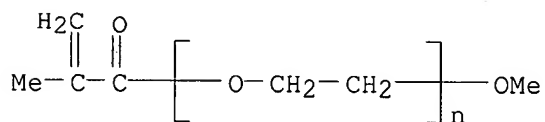
CN 2-Propenoic acid, 2-methyl-, 2-hydroxyethyl ester, polymer with ethenylbenzene and α -(2-methyl-1-oxo-2-propenyl)- ω -methoxypoly(oxy-1,2-ethanediyl), triblock (9CI) (CA INDEX NAME)

CM 1

CRN 26915-72-0

CMF (C2 H4 O)_n C5 H8 O2

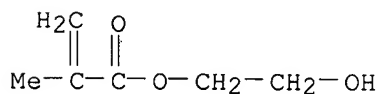
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CM 2

CRN 868-77-9

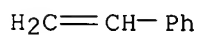
CMF C6 H10 O3



CM 3

CRN 100-42-5

CMF C8 H8



RN 849950-63-6 HCAPLUS

CN 2-Propenoic acid, 2-hydroxyethyl ester, polymer with ethenylbenzene and α -(2-methyl-1-oxo-2-propenyl)- ω -methoxypoly(oxy-1,2-

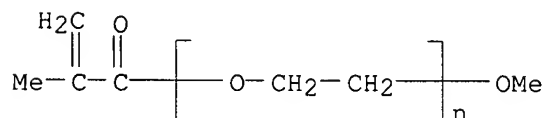
ethanediyl), pentablock (9CI) (CA INDEX NAME)

CM 1

CRN 26915-72-0

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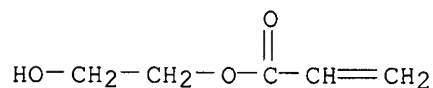
CCI PMS



CM 2

CRN 818-61-1

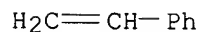
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CM 3

CRN 100-42-5

CMF C8 H8



RN 877834-07-6 HCAPLUS

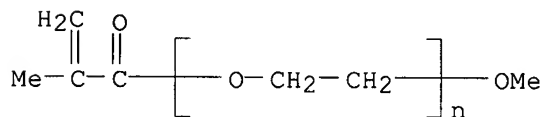
CN 2-Propenoic acid, 2-methyl-, oxiranylmethyl ester, polymer with ethenylbenzene and α-(2-methyl-1-oxo-2-propenyl)-ω-methoxypoly(oxy-1,2-ethanediyl), graft (9CI) (CA INDEX NAME)

CM 1

CRN 26915-72-0

CMF (C2 H4 O)_n C5 H8 O2

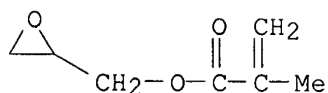
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CM 2

CRN 106-91-2

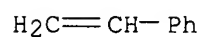
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CM 3

CRN 100-42-5

CMF C8 H8



RN 877837-29-1 HCAPLUS

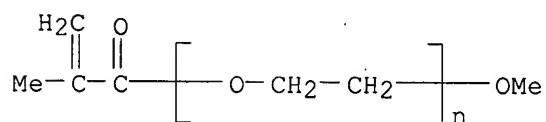
 CN 2-Propenoic acid, 2-methyl-, trimethylsilyl ester, polymer with ethenylbenzene and α -(2-methyl-1-oxo-2-propenyl)- ω -methoxypoly(oxy-1,2-ethanediyl), pentablock (9CI) (CA INDEX NAME)

CM 1

CRN 26915-72-0

 CMF (C2 H4 O)_n C5 H8 O2

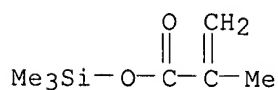
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CM 2

CRN 13688-56-7

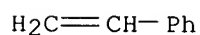
CMF C7 H14 O2 Si



CM 3

CRN 100-42-5

CMF C8 H8



RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
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Fukoku Co Ltd	1998		JP 10-45994 A	HCAPLUS
Kanemura, K	2003	53	Nano Kozo o Seigyo S	
Matsushita Electric Ind	1993		JP 05-120912 A	HCAPLUS
Nippon Soda Co Ltd	2004		JP 2004107641 A	HCAPLUS
Nissan Motor Co Ltd	2003		JP 2003217594 A	HCAPLUS
Shimada, M	2003	53	Nano Kozo o Seigyo S	
Shin-Etsu Chemical Co L	1995		JP 07-109321 A	HCAPLUS
Shin-Etsu Chemical Co L	1995		JP 07-230810 A	HCAPLUS
Shintant, T	2003	52	Nano Kozo o Seigyo S	
Telefonaktiebolaget Lm	2003		WO 0146280 A1	HCAPLUS
Telefonaktiebolaget Lm	2003		US 20010033974 A1	
Telefonaktiebolaget Lm	2003		JP 2003518172 A	
Ube Industries Ltd	2002		JP 2002260441 A	HCAPLUS
Ube Industries Ltd	2003		JP 200345226 A	

L110 ANSWER 12 OF 40 HCAPLUS COPYRIGHT 2007 ACS on STN

AN 2005:15851 HCAPLUS

DN 142:123210

TI Imageable element with solvent-resistant polymeric binder for lithographic printing plate substrate

IN Hayashi, Kouji; Munnelly, Heidi M.; Tao, Ting; Huang, Jianbing; Saraiya, Shashikant

PA Kodak Polychrome Graphics LLC, Japan

SO U.S. Pat. Appl. Publ., 18 pp., Cont.-in-part of U.S. Ser. No. 842,111.
CODEN: USXXCO

DT Patent

LA English

FAN.CNT 7

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2005003285	A1	20050106	US 2004-872209	20040617 <--
	US 2002155375	A1	20021024	US 2001-826300	20010404 <--
	US 6582882	B2	20030624		
	US 2003064318	A1	20030403	US 2002-119454	20020410 <--
	US 6899994	B2	20050531		
	US 2005221215	A1	20051006	US 2004-813221	20040330 <--
	US 7049046	B2	20060523		
	US 2005250040	A1	20051110	US 2004-842111	20040510 <--
	US 7045271	B2	20060516		
	US 2004260050	A1	20041223	US 2004-891727	20040715 <--
	US 7172850	B2	20070206		
	US 2005123853	A1	20050609	US 2004-13954	20041216 <--
	WO 2006007270	A1	20060119	WO 2005-US19391	20050602 <--
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	RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
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	US 2002-119454	A2	20020410		<--
	US 2004-813221	A2	20040330		<--
	US 2004-842111	A2	20040510		<--

US 2004-872209 A2 20040617 <--

US 2004-891727 A2 20040715 <--

AB The present invention provides an imageable element including a lithog. substrate and an imageable layer disposed on the substrate. The imageable layer includes a radically polymerizable component, an initiator system capable of generating radicals sufficient to initiate a polymerization reaction upon exposure to imaging radiation, and a polymeric binder having a hydrophobic backbone and including both constitutional units having a pendant cyano group attached directly to the hydrophobic backbone, and constitutional units having a pendant group including a hydrophilic poly(alkylene oxide) segment. When the imageable element is imaged and developed, the resulting printing plate may exhibit improved on-press solvent resistance and longer press life.

IC ICM G03C0001-76

INCL 430056000; X43-030.0

CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

Section cross-reference(s): 35, 38

IT **9081-45-2P**, Poly(ethylene glycol)methyl ether methacrylate-styrene copolymer 100481-51-4P, Acrylonitrile-polyethylene glycol monomethyl ether methacrylate-styrene copolymer 123547-25-1P, Allyl methacrylate-polyethylene glycol monomethyl ether methacrylate copolymer 155620-12-5P 820260-75-1P, Methacrylonitrile-polyethylene glycol monomethyl ether methacrylate-styrene copolymer
 RL: NUU (Other use, unclassified); PRP (Properties); SPN (Synthetic preparation); PREP (Preparation); USES (Uses)

(Imageable element with solvent-resistant polymeric binder for lithog. printing plate substrate)

IT **9081-45-2P**, Poly(ethylene glycol)methyl ether methacrylate-styrene copolymer

RL: NUU (Other use, unclassified); PRP (Properties); SPN (Synthetic preparation); PREP (Preparation); USES (Uses)

(Imageable element with solvent-resistant polymeric binder for lithog. printing plate substrate)

RN 9081-45-2 HCAPLUS

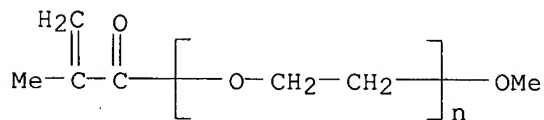
CN Poly(oxy-1,2-ethanediyl), α -(2-methyl-1-oxo-2-propenyl)- ω -methoxy-, polymer with ethenylbenzene (9CI) (CA INDEX NAME)

CM 1

CRN 26915-72-0

 CMF (C2 H4 O)_n C5 H8 O2

CCI PMS



CM 2

CRN 100-42-5

CMF C8 H8



L110 ANSWER 13 OF 40 HCAPLUS COPYRIGHT 2007 ACS on STN

AN 2004:80751 HCAPLUS

DN 140:149116

 TI Solid polymer **electrolyte**

IN Muramoto, Hiroo; Niitani, Takeshi

PA Nippon Soda Co., Ltd., Japan

SO PCT Int. Appl., 54 pp.

CODEN: PIXXD2

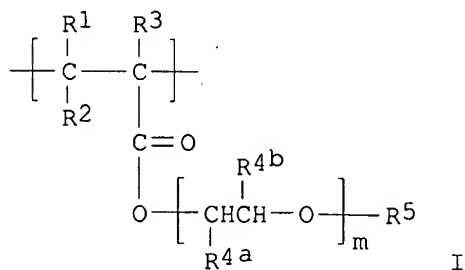
DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2004009663	A1	20040129	WO 2003-JP9328	20030723 <--
	W:			AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW	
	RW:			GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG	
	AU 2003252245	A1	20040209	AU 2003-252245	20030723 <--
	JP 2004107641	A	20040408	JP 2003-200804	20030723 <--
	EP 1553117	A1	20050713	EP 2003-765362	20030723 <--
	EP 1553117	B1	20070117		
	R:			AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK	
	CN 1668662	A	20050914	CN 2003-817326	20030723 <--
	US 2005256256	A1	20051117	US 2005-523085	20050202 <--
PRAI	JP 2002-214603	A	20020723	<--	
	WO 2003-JP9328	W	20030723	<--	

GI



AB The present invention relates to (i) a solid polymer **electrolyte** which is excellent in thermal properties, phys. properties, and ionic conductivity and is on a level close to a practical level, especially a wholly solid

electrolyte and (ii) a copolymer composition serving as a base for producing the **electrolyte**. The solid polymer **electrolyte** comprises (A) a copolymer comprising a block chain A comprising repeating units I, a block chain B comprising repeating units

(CR6R7CR8R9), and a block chain C comprising repeating units (CR10R11CR12R13), these chains being arranged in the order of B, A, and C, and (B) an **electrolyte** salt, wherein R1, R2, R3 = independently H or C1-10 hydrocarbon, R1 and R3 may form a ring; R4a, R4b = independently H or methyl; R5 = H, hydrocarbon, acyl, or silyl group; R6, R7, R8, R10, R11, R12 = independently H or C1-10 hydrocarbon; R9 = aryl; R13 = aryl or heteroaryl; and m = 2-100 integer. Thus, 22.35 g Blemmer PME 1000 was polymerized in the presence of dichlorotris(triphenylphosphine) ruthenium, di-n-butylamine, and 2,2-dichloroacetophenone to give a polymer with Mn 122,500, 6.13 g of which was polymerized with 2.60 g styrene to give a styrene-polyoxyalkylene graft block copolymer with Mn 135,000, 1 g of which was mixed with 0.09 g lithium perchlorate, cast on a Teflon plate, and dried at room temperature for 24 h and 60° for 24 h to give a solid polymer **electrolyte** with ionic conductivity 3.8×10^{-4} S/cm at 23°.

- IC ICM C08F0297-00
- ICS H01B0001-06
- CC 52-2 (Electrochemical, Radiational, and Thermal Energy Technology)
- Section cross-reference(s): 38
- ST solid polymer **electrolyte**; styrene Blemmer graft block copolymer
- lithium perchlorate solid **electrolyte**
- IT Membranes, nonbiological
- (elec. conductive; preparation of solid polymer **electrolytes** with
- good thermal properties, phys. properties, and ionic conductivity)
- IT Acids, uses
- Alkali metal salts
- Phosphonium compounds
- Quaternary ammonium compounds, uses
- Transition metal salts
- RL: MOA (Modifier or additive use); USES (Uses)
- (**electrolytic** salts; preparation of solid polymer
- electrolytes** with good thermal properties, phys. properties,
- and ionic conductivity)
- IT **Secondary batteries**
- (lithium; preparation of solid polymer **electrolytes** with good
- thermal properties, phys. properties, and ionic conductivity)
- IT Polymerization
- (living, radical; preparation of solid polymer **electrolytes** with
- good thermal properties, phys. properties, and ionic conductivity)
- IT **Ionic conductors**
- (**polymeric**; preparation of solid polymer **electrolytes**
- with good thermal properties, phys. properties, and ionic conductivity)
- IT Polyoxyalkylenes, uses
- RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP
- (Properties); TEM (Technical or engineered material use); PREP
- (Preparation); USES (Uses)
- (polystyrene-, block, graft, lithium complexes; preparation of solid polymer
- electrolytes** with good thermal properties, phys. properties,
- and ionic conductivity)
- IT **Polymer electrolytes**
- (preparation of solid polymer **electrolytes** with good thermal
- properties, phys. properties, and ionic conductivity)
- IT 9003-53-6P, Styrene homopolymer 87105-87-1P, Blemmer PME 1000
- homopolymer
- RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT
- (Reactant or reagent)
- (intermediate, living polymer; preparation of solid polymer
- electrolytes** with good thermal properties, phys. properties,
- and ionic conductivity)
- IT 7439-93-2DP, Lithium, polyoxyalkylene complexes, perchlorate-containing

RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(preparation of solid polymer **electrolytes** with good thermal properties, phys. properties, and ionic conductivity)

IT **846568-02-3P**, Ethylene oxide-styrene triblock graft copolymer
RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(preparation of solid polymer **electrolytes** with good thermal properties, phys. properties, and ionic conductivity)

IT **112119-04-7DP**, lithium complexes, perchlorate-containing
112119-04-7P 651724-21-9P 697284-07-4P 846569-40-2P

RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(triblock; preparation of solid polymer **electrolytes** with good thermal properties, phys. properties, and ionic conductivity)

IT **651724-21-9DP**, lithium complexes, perchlorate-containing
697284-07-4DP, lithium complexes, perchlorate-containing
846569-40-2DP, lithium complexes, perchlorate-containing

RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(triblock; preparation of solid polymer **electrolytes** with good thermal properties, phys. properties, and ionic conductivity)

IT **846568-02-3P**, Ethylene oxide-styrene triblock graft copolymer
RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(preparation of solid polymer **electrolytes** with good thermal properties, phys. properties, and ionic conductivity)

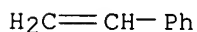
RN **846568-02-3 HCAPLUS**

CN Oxirane, polymer with ethenylbenzene, graft, triblock (9CI) (CA INDEX NAME)

CM 1

CRN 100-42-5

CMF C8 H8



CM 2

CRN 75-21-8

CMF C2 H4 O



IT **112119-04-7DP**, lithium complexes, perchlorate-containing
112119-04-7P 651724-21-9P 697284-07-4P 846569-40-2P

RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(triblock; preparation of solid polymer **electrolytes** with good thermal properties, phys. properties, and ionic conductivity)

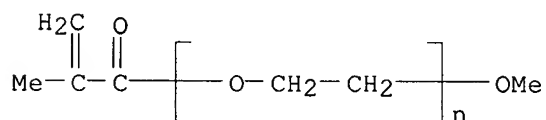
RN 112119-04-7 HCAPLUS
 CN Poly(oxy-1,2-ethanediyl), α -(2-methyl-1-oxo-2-propenyl)- ω -methoxy-, polymer with ethenylbenzene, block (9CI) (CA INDEX NAME)

CM 1

CRN 26915-72-0

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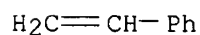
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CRN 100-42-5

CMF C8 H8



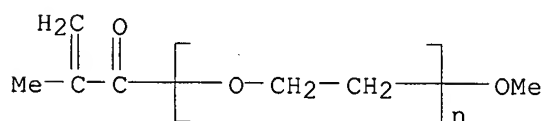
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 CN Poly(oxy-1,2-ethanediyl), α -(2-methyl-1-oxo-2-propenyl)- ω -methoxy-, polymer with ethenylbenzene, block (9CI) (CA INDEX NAME)

CM 1

CRN 26915-72-0

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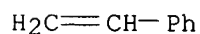
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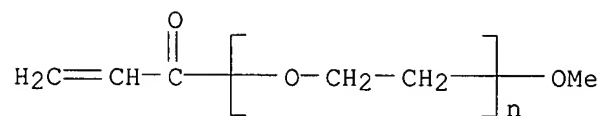
CMF C8 H8



RN 651724-21-9 HCAPLUS
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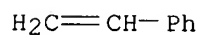
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CRN 32171-39-4
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CCI PMS



CM 2

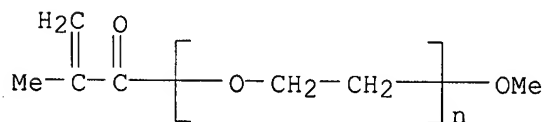
CRN 100-42-5
CMF C8 H8



RN 697284-07-4 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), α -(2-methyl-1-oxo-2-propenyl)- ω -methoxy-, polymer with ethenylbenzene, triblock (9CI) (CA INDEX NAME)

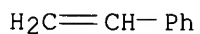
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CRN 26915-72-0
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CCI PMS



CM 2

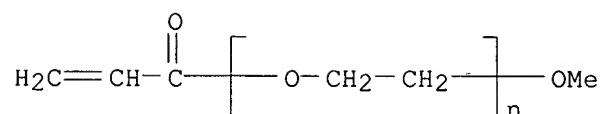
CRN 100-42-5
CMF C8 H8



RN 846569-40-2 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), α -(1-oxo-2-propenyl)- ω -methoxy-, polymer with ethenylbenzene, triblock (9CI) (CA INDEX NAME)

CM 1

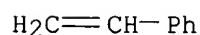
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CMF (C2 H4 O)_n C4 H6 O2
CCI PMS



CM 2

CRN 100-42-5

CMF C8 H8



IT 651724-21-9DP, lithium complexes, perchlorate-containing
 697284-07-4DP, lithium complexes, perchlorate-containing
 846569-40-2DP, lithium complexes, perchlorate-containing
 RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or
 engineered material use); PREP (Preparation); USES (Uses)
 (triblock; preparation of solid polymer **electrolytes** with good
 thermal properties, phys. properties, and ionic conductivity)

RN 651724-21-9 HCAPLUS

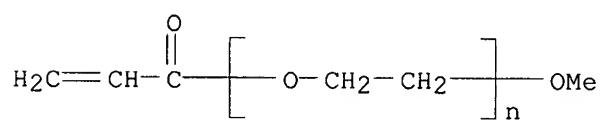
 CN Poly(oxy-1,2-ethanediyl), α -(1-oxo-2-propenyl)- ω -methoxy-,
 polymer with ethenylbenzene, block (9CI) (CA INDEX NAME)

CM 1

CRN 32171-39-4

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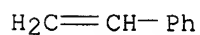
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CRN 100-42-5

CMF C8 H8



RN 697284-07-4 HCAPLUS

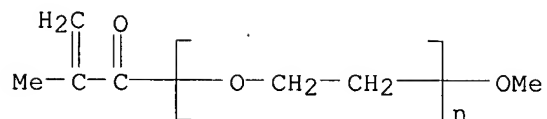
 CN Poly(oxy-1,2-ethanediyl), α -(2-methyl-1-oxo-2-propenyl)- ω -
 methoxy-, polymer with ethenylbenzene, triblock (9CI) (CA INDEX NAME)

CM 1

CRN 26915-72-0

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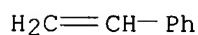
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CM 2

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CMF C8 H8



RN 846569-40-2 HCAPLUS

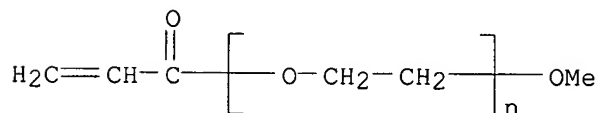
 CN Poly(oxy-1,2-ethanediyl), α -(1-oxo-2-propenyl)- ω -methoxy-,
polymer with ethenylbenzene, triblock (9CI) (CA INDEX NAME)

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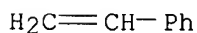
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CM 2

CRN 100-42-5

CMF C8 H8



RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Shin-Etsu Chemical Co L	1998			JP 10-208545 A	HCAPLUS
Shin-Etsu Chemical Co L	1998			JP 10-237143 A	HCAPLUS
Shin-Etsu Chemical Co L	1998			US 6096234 A1	HCAPLUS
Shin-Etsu Chemical Co L	1999			JP 11-43523 A	HCAPLUS
Ube Industries Ltd	1991			JP 03-196407 A	HCAPLUS

L110 ANSWER 14 OF 40 HCAPLUS COPYRIGHT 2007 ACS on STN

AN 2003:754853 HCAPLUS

DN 139:261658

TI Manufacture of polymer dispersions as additives for building materials

IN Koppers, Markus; Pakusch, Joachim; Anders, Hermann; Schmidt, Marco; Denu,

Hans-Juergen
 PA BASF Aktiengesellschaft, Germany
 SO Eur. Pat. Appl., 17 pp.
 CODEN: EPXXDW
 DT Patent
 LA German
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 1347002	A2	20030924	EP 2003-3881	20030221 <--
	EP 1347002	A3	20050713		
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	DE 10213026	A1	20031002	DE 2002-10213026	20020322 <--
	US 6809148	B1	20041026	US 2003-383609	20030310 <--
	JP 2003301015	A	20031021	JP 2003-78366	20030320 <--
PRAI	DE 2002-10213026	A	20020322	<--	

AB Acrylic copolymer dispersions, useful for improving tensile strength and elongation of hydraulic building materials, especially cement, are manufactured by copolymn. of conjugated aliphatic dienes with vinyl aromatic monomers, (meth)acrylate esters of C2-10 alkanediols and/or (meth)acrylate esters of poly(ethylene glycol) alkyl ethers CH₂:CR₁CO₂(CH₂CH₂O)_nR₂ (R₁ = H, Me; R₂ = Cl-4 alkyl; n = 1-100), and optionally, other ethylenically unsatd. monomers. A typical title dispersion was manufactured by radical emulsion polymerization of hydroxyethyl acrylate, styrene and butadiene in the presence

of polystyrene seed emulsion and polyethylene glycol allyl ether as copolymerizable emulsifier.

IC ICM C08F0220-12
 ICS C08F0220-18; C08J0003-00; C04B0024-26
 CC 35-4 (Chemistry of Synthetic High Polymers)
 Section cross-reference(s): 58

IT 26354-04-1P, Butadiene-Hydroxyethyl acrylate-Styrene copolymer
 35428-64-9P, Acrylic acid-Butadiene-Hydroxyethyl acrylate-Styrene copolymer 602125-14-4P 602125-23-5P

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
 (aqueous dispersion; manufacture of polymer dispersions as additives for hydraulic building materials)

IT 602125-14-4P 602125-23-5P

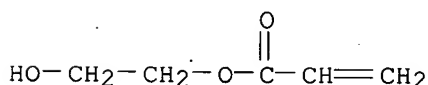
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
 (aqueous dispersion; manufacture of polymer dispersions as additives for hydraulic building materials)

RN 602125-14-4 HCAPLUS

CN 2-Propenoic acid, 2-hydroxyethyl ester, polymer with 1,3-butadiene, ethenylbenzene and oxirane, graft (9CI) (CA INDEX NAME)

CM 1

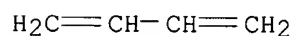
CRN 818-61-1
 CMF C5 H8 O3



CM 2

CRN 106-99-0

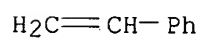
CMF C4 H6



CM 3

CRN 100-42-5

CMF C8 H8



CM 4

CRN 75-21-8

CMF C2 H4 O



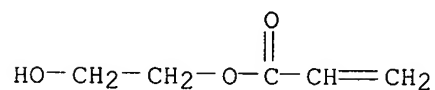
RN 602125-23-5 HCAPLUS

CN 2-Propenoic acid, 2-hydroxyethyl ester, polymer with 1,3-butadiene, ethenylbenzene, methyloxirane and oxirane, graft (9CI) (CA INDEX NAME)

CM 1

CRN 818-61-1

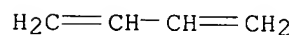
CMF C5 H8 O3



CM 2

CRN 106-99-0

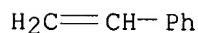
CMF C4 H6



CM 3

CRN 100-42-5

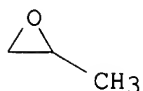
CMF C8 H8



CM 4

CRN 75-56-9

CMF C3 H6 O



CM 5

CRN 75-21-8

CMF C2 H4 O



L110 ANSWER 15 OF 40 HCAPLUS COPYRIGHT 2007 ACS on STN

AN 2003:219699 HCAPLUS

DN 138:239509

TI Colored fine particle dispersion and a water-based ink for an ink-jet system

IN Ninomiya, Hidetaka; Ando, Hiroaki

PA Konica Corporation, Japan

SO Eur. Pat. Appl., 16 pp.

CODEN: EPXXDW

DT Patent

LA English

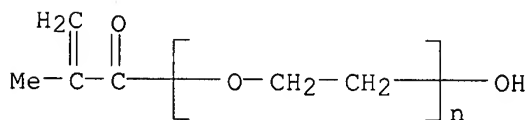
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 1293544	A1	20030319	EP 2002-19826	20020906 <--
	EP 1293544	B1	20050216		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK				
	US 2003055115	A1	20030320	US 2002-237433	20020906 <--
	JP 2003238872	A	20030827	JP 2002-266638	20020912 <--
PRAI	JP 2001-281321	A	20010917	<--	
	JP 2001-379785	A	20011213	<--	

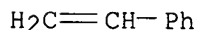
AB A water-based ink for ink-jet printing comprises colored particles containing: (a) a core particle having a colorant; and (b) a shell having a resin and encapsulating the core particle, wherein the resin comprises a monomer unit having a hydroxyl group in an amount of 0.1 to 50 weight% based on the total weight of the shell. A colored fine particle was prepared by mixing polyvinyl butyral and C.I. Solvent Blue 70 to form a core, then polymerizing a shell layer from styrene and 2-hydroxyethyl methacrylate.

IC ICM C09D0011-00

ICS C09D0011-02
 CC 42-12 (Coatings, Inks, and Related Products)
 IT 26010-51-5P, 2-Hydroxyethylmethacrylate-styrene copolymer
 78736-61-5P, Polyethyleneglycol monomethacrylate-styrene copolymer
 RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
 (encapsulant; colored fine particle dispersion and a water-based ink for an ink-jet system)
 IT 78736-61-5P, Polyethyleneglycol monomethacrylate-styrene copolymer
 RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
 (encapsulant; colored fine particle dispersion and a water-based ink for an ink-jet system)
 RN 78736-61-5 HCAPLUS
 CN Poly(oxy-1,2-ethanediyl), α -(2-methyl-1-oxo-2-propenyl)- ω -hydroxy-, polymer with ethenylbenzene (9CI) (CA INDEX NAME)
 CM 1
 CRN 25736-86-1
 CMF (C2 H4 O)_n C4 H6 O2
 CCI PMS



CM 2
 CRN 100-42-5
 CMF C8 H8



RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Cabot Corp	2001			WO 0130919 A	HCAPLUS
Ciba Sc Holding Ag	2000			WO 0053597 A	HCAPLUS
Ishizuka, T	2001			US 2001020056 A1	
Lansell, N	1997			WO 9723575 A	HCAPLUS
Siemensmeyer, K	2002			WO 0218504 A	HCAPLUS
Wickramanayake, P	1996			US 5531816 A	HCAPLUS

L110 ANSWER 16 OF 40 HCAPLUS COPYRIGHT 2007 ACS on STN

AN 2002:793939 HCAPLUS

DN 137:317961

TI Thermally imageable lithographic printing plate comprising graft polymer

IN Pappas, S. Peter; Saraiya, Shashikant

PA Kodak Polychrome Graphics, L.L.C., USA

SO PCT Int. Appl., 56 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 7

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002082180	A1	20021017	WO 2002-US1929	20020123 <--
	W: JP				
	RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR				
	US 2002155375	A1	20021024	US 2001-826300	20010404 <--
	US 6582882	B2	20030624		
	EP 1379918	A1	20040114	EP 2002-702061	20020123 <--
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY, TR				
	JP 2004525420	T	20040819	JP 2002-579886	20020123 <--
PRAI	US 2001-826300	A	20010404	<--	
	WO 2002-US1929	W	20020123	<--	

AB The present invention provides a thermally imageable composition that is useful in thermal imaging of, for example, lithog. plates and printed circuit boards. The imageable element comprises a substrate and a thermally imageable composition which includes a graft copolymer having hydrophobic and hydrophilic segments. Upon imagewise exposure to thermal energy, the graft copolymer produces exposed regions that are less soluble in a developer than the unexposed regions. Also included is a method of producing an imaged element which includes a graft copolymer according to the present invention. The graft copolymers of present invention can be imaged without a binder. Furthermore, the thermally imageable compns. can be imaged and developed without the need of an intermediate pre-heat step. In addition, the present invention does not require the use of an intermediate barrier or a covering layer.

ICM G03C0001-73

ICS G03C0001-76; G03F0007-038; G03F0007-09; G03F0007-30

CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

Section cross-reference(s): 37, 38

IT 25133-97-5P, Ethyl acrylate-methacrylic acid-methyl methacrylate copolymer 115115-55-4P 167699-23-2P 176779-38-7P,

Oxirane-styrene graft copolymer, methyl ether 470696-94-7P

470702-38-6P, Oxirane-styrene graft copolymer, dodecyl ether

RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(thermally imageable lithog. printing plate comprising graft polymer)

IT 115115-55-4P 167699-23-2P

RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(thermally imageable lithog. printing plate comprising graft polymer)

RN 115115-55-4 HCAPLUS

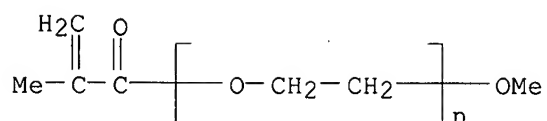
 CN Poly(oxy-1,2-ethanediyl), α -(2-methyl-1-oxo-2-propenyl)- ω -methoxy-, polymer with ethenylbenzene, graft (9CI) (CA INDEX NAME)

CM 1

CRN 26915-72-0

CMF (C2 H4 O)n C5 H8 O2

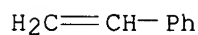
CCI PMS



CM 2

CRN 100-42-5

CMF C8 H8



RN 167699-23-2 HCAPLUS

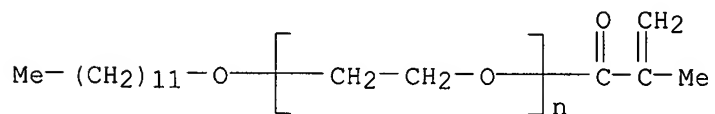
 CN Poly(oxy-1,2-ethanediyl), α -(2-methyl-1-oxo-2-propenyl)- ω -(dodecyloxy)-, polymer with ethenylbenzene, graft (9CI) (CA INDEX NAME)

CM 1

CRN 50977-30-5

 CMF (C2 H4 O)_n C16 H30 O2

CCI PMS



CM 2

CRN 100-42-5

CMF C8 H8



RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Fuji Photo Film Co Ltd	1992			EP 0510646 A1	HCAPLUS
Higashi	1991			DE 4108496 A1	HCAPLUS

L110 ANSWER 17 OF 40 HCAPLUS COPYRIGHT 2007 ACS on STN

AN 2002:364030 HCAPLUS

DN 136:370519

TI (meth)acrylate ester-based resin composition

IN Nakamura, Kazuhiko; Yokota, Yoshiyuki; Takahashi, Kunio; Yoshida, Masaya

PA Nippon Shokubai Co., Ltd., Japan

SO Eur. Pat. Appl., 42 pp.

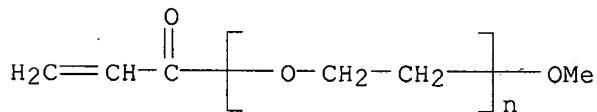
CODEN: EPXXDW

DT Patent

LA English

FAN.CNT 1

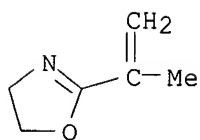
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 1205498	A1	20020515	EP 2001-120149	20010822 <--
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
	US 2002091197	A1	20020711	US 2001-938652	20010827 <--
	US 6489396	B2	20021203		
	JP 2002206042	A	20020726	JP 2001-258441	20010828 <--
PRAI	JP 2000-345966	A	20001113	<--	
AB	A novel (meth)acrylate ester-based resin composition, which exhibits various good properties and is useful in paints, adhesives, and fiber-processing materials, comprises a (meth)acrylate ester-based polymer and a crosslinking agent, wherein the (meth)acrylate ester-based polymer is obtained by polymerizing a monomer component including an alkylcyclohexylalkyl (meth)acrylate as an essential component and has a reactive group wherein the crosslinking agent has at least two functional groups that are reactable with the reactive group in the polymer.				
IC	ICM C08F0220-18				
CC	37-6 (Plastics Manufacture and Processing)				
	Section cross-reference(s): 38, 42				
IT	402865-15-0P 425409-61-6P 425409-62-7P 425414-27-3P 425414-29-5P				
	RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PREP (Preparation); USES (Uses)				
	(meth)acrylate ester-based resin composition)				
IT	425409-61-6P 425409-62-7P 425414-29-5P				
	RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PREP (Preparation); USES (Uses)				
	(meth)acrylate ester-based resin composition)				
RN	425409-61-6 HCAPLUS				
CN	Oxazole, 4,5-dihydro-2-(1-methylethenyl)-, polymer with α -(1-oxo-2-propenyl)- ω -methoxypoly(oxy-1,2-ethanediyl), graft (9CI) (CA INDEX NAME)				
CM	1				
CRN	32171-39-4				
CMF	(C2 H4 O) _n C4 H6 O2				
CCI	PMS				



CM 2

CRN 10471-78-0

CMF C6 H9 N O

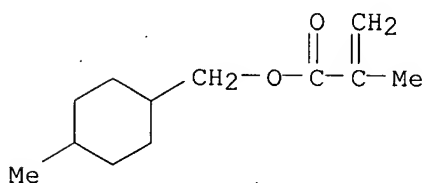


RN 425409-62-7 HCAPLUS
 CN 2-Propenoic acid, 2-methyl-, (4-methylcyclohexyl)methyl ester, polymer
 with 4,5-dihydro-2-(1-methylethenyl)oxazole and α -(1-oxo-2-propenyl)-
 ω -methoxypoly(oxy-1,2-ethanediyl), graft (9CI) (CA INDEX NAME)

CM 1

CRN 364753-38-8

CMF C12 H20 O2

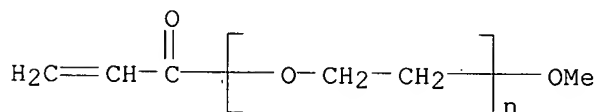


CM 2

CRN 32171-39-4

CMF (C2 H4 O)_n C4 H6 O2

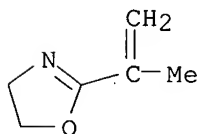
CCI PMS



CM 3

CRN 10471-78-0

CMF C6 H9 N O



RN 425414-29-5 HCAPLUS
 CN 2-Propenoic acid, 2-methyl-, (4-methylcyclohexyl)methyl ester, polymer
 with 4,5-dihydro-2-(1-methylethenyl)oxazole and oxirane, methyl ether,
 graft (9CI) (CA INDEX NAME)

CM 1

CRN 67-56-1

CMF C H4 O

H₃C-OH

CM 2

CRN 425414-28-4

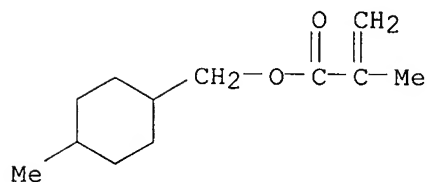
CMF (C12 H20 O2 . C6 H9 N O . C2 H4 O) x

CCI PMS

CM 3

CRN 364753-38-8

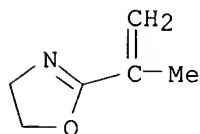
CMF C12 H20 O2



CM 4

CRN 10471-78-0

CMF C6 H9 N O



CM 5

CRN 75-21-8

CMF C2 H4 O



RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
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jan delaval - 8 february 2007

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=====+=====+=====+=====+=====+=====
Bayer          |1956 |      |      |FR 1119407 A      |
Chisso Corp    |1992 |      |      |GB 2253208 A      |HCAPLUS

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L110 ANSWER 18 OF 40 HCAPLUS COPYRIGHT 2007 ACS on STN

AN 2001:396495 HCAPLUS

DN 135:20410

TI Compatibilizing agent for radical-copolymerizable unsaturated resin composition, molding material, and molded article

IN Yasumura, Takashi; Takano, Akira

PA Dainippon Ink and Chemicals, Inc., Japan

SO Eur. Pat. Appl., 24 pp.

CODEN: EPXXDW

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 1103569	A2	20010530	EP 2000-124393	20001121 <--
	EP 1103569	A3	20040317		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	CA 2325972	A1	20010524	CA 2000-2325972	20001114 <--
	US 6670428	B1	20031230	US 2000-712161	20001115 <--
	NO 2000005914	A	20010525	NO 2000-5914	20001122 <--
	JP 2001213967	A	20010807	JP 2000-355766	20001122 <--
	CN 1306017	A	20010801	CN 2000-137390	20001124 <--
	US 2002111429	A1	20020815	US 2002-73926	20020214 <--
	US 6815499	B2	20041109		
PRAI	JP 1999-332664	A	19991124	<--	
	US 2000-712161	A3	20001115	<--	

AB A compatibilizing agent, for compatibilizing a radically copolymerizable unsatd. resin with an addition polymerized polymer, is a graft copolymer which contains a styrene monomer as a principal component, and has a principal chain consisting of a copolymer with a (meth)acrylate monomer and a side chain selected from a ring-opening polymerized polyether side chain consisting of a polyoxyalkylene ether, a polyester side chain, and a polycarbonate side chain. A radically copolymerizable unsatd. resin composition comprises the compatibilizing agent, an addition polymerized polymer, a radically copolymerizable unsatd. resin, and a polymerizable unsatd. monomer. Molded articles from the composition is also claimed.

IC ICM C08F0212-08

ICS C08F0220-26; C08F0290-06; C08F0285-00; C08L0067-06; C08L0025-08; C08L0053-02

CC 37-6 (Plastics Manufacture and Processing)

Section cross-reference(s): 38

IT 112356-77-1P 115115-55-4P 176779-38-7P 255829-08-4P

342420-64-8P 342427-71-8P 342427-72-9P 342428-40-4P

342428-42-6P

RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PREP (Preparation); USES (Uses)

(compatibilizing agent for radical-copolymerizable unsatd. resin composition, molding material, and molded article)

IT 115115-55-4P 255829-08-4P 342428-40-4P

RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PREP (Preparation); USES (Uses)

(compatibilizing agent for radical-copolymerizable unsatd. resin composition, molding material, and molded article)

RN 115115-55-4 HCAPLUS

CN Poly(oxy-1,2-ethanediyl), α -(2-methyl-1-oxo-2-propenyl)- ω -

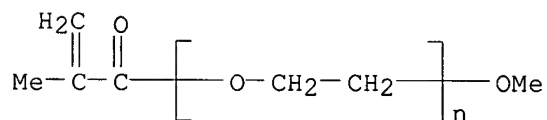
methoxy-, polymer with ethenylbenzene, graft (9CI) (CA INDEX NAME)

CM 1

CRN 26915-72-0

CMF (C2 H4 O)_n C5 H8 O2

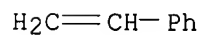
CCI PMS



CM 2

CRN 100-42-5

CMF C8 H8



RN 255829-08-4 HCAPLUS

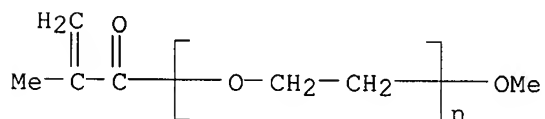
CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with ethenylbenzene and α-(2-methyl-1-oxo-2-propenyl)-ω-methoxypoly(oxy-1,2-ethanediyl), graft (9CI) (CA INDEX NAME)

CM 1

CRN 26915-72-0

CMF (C2 H4 O)_n C5 H8 O2

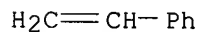
CCI PMS



CM 2

CRN 100-42-5

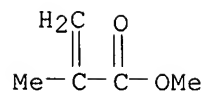
CMF C8 H8



CM 3

CRN 80-62-6

CMF C5 H8 O2



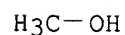
RN 342428-40-4 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with ethenylbenzene and oxirane, methyl ether, graft (9CI) (CA INDEX NAME)

CM 1

CRN 67-56-1

CMF C H4 O



CM 2

CRN 342428-39-1

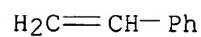
CMF (C8 H8 . C5 H8 O2 . C2 H4 O) x

CCI PMS

CM 3

CRN 100-42-5

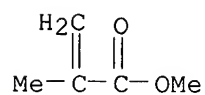
CMF C8 H8



CM 4

CRN 80-62-6

CMF C5 H8 O2



CM 5

CRN 75-21-8

CMF C2 H4 O



L110 ANSWER 19 OF 40 HCAPLUS COPYRIGHT 2007 ACS on STN
AN 2000:881248 HCAPLUS

jan delaval - 8 february 2007

DN 134:57982
 TI Binding agents modified by nanoparticles for coating agents and use of the same
 IN Ducoffre, Volker; Flosbach, Carmen; Tannert, Klaus; Weidenhammer, Petra
 PA E. I. Du Pont de Nemours & Co., USA
 SO PCT Int. Appl., 20 pp.
 CODEN: PIXXD2

DT Patent
 LA German

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2000075244	A1	20001214	WO 2000-EP4695	20000524 <--
	W: AU, BR, CN, JP, MX, PL, US, ZA				
	RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	EP 1187885	A1	20020320	EP 2000-936787	20000524 <--
	EP 1187885	B1	20021113		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
	AT 227760	T	20021115	AT 2000-936787	20000524 <--
	JP 2003501543	T	20030114	JP 2001-502518	20000524 <--
	ES 2182805	T3	20030316	ES 2000-936787	20000524 <--
	US 6649672	B1	20031118	US 2002-9382	20020320 <--
PRAI	DE 1999-19925331	A	19990602	<--	
	WO 2000-EP4695	W	20000524	<--	

AB Compatibility in nanoparticle-containing coatings is improved by using binders obtained by reacting ≥ 1 epoxy binders with carboxy-functional nanoparticles.

IC ICM C09D0007-12

CC 42-5 (Coatings, Inks, and Related Products)

IT 313355-24-7P

RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
 (crosslinked binders; epoxy binders modified by nanoparticles for coatings)

IT 313257-21-5DP, 1,4-Butanediol monoacrylate-glycidyl methacrylate-isobutyl acrylate-styrene copolymer, reaction products with carboxy-functional nanoparticles based on silicon-oxygen networks **313257-25-9DP**, 1,4-Butanediol monoacrylate-hydroxypropyl methacrylate-isobutyl acrylate-styrene copolymer, reaction products with carboxy-functional nanoparticles based on silicon-oxygen networks

RL: IMF (Industrial manufacture); PEP (Physical, engineering or chemical process); PREP (Preparation); PROC (Process)
 (epoxy binders modified by nanoparticles for coatings)

IT 313355-24-7P

RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
 (crosslinked binders; epoxy binders modified by nanoparticles for coatings)

RN 313355-24-7 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, monoester with 1,2-propanediol, polymer with Cylink 2000, ethenylbenzene, 4-hydroxybutyl 2-propenoate and 2-methylpropyl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 313355-22-5

CMF Unspecified

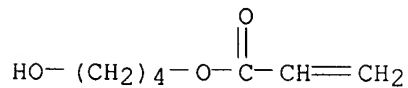
CCI MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 2478-10-6

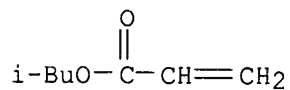
CMF C7 H12 O3



CM 3

CRN 106-63-8

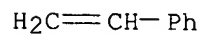
CMF C7 H12 O2



CM 4

CRN 100-42-5

CMF C8 H8



CM 5

CRN 27813-02-1

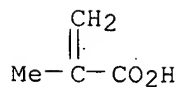
CMF C7 H12 O3

CCI IDS

CM 6

CRN 79-41-4

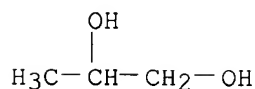
CMF C4 H6 O2



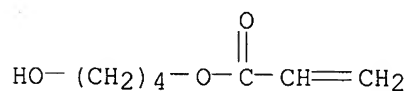
CM 7

CRN 57-55-6

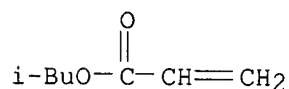
CMF C3 H8 O2



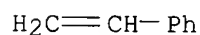
IT **313257-25-9DP**, 1,4-Butanediol monoacrylate-hydroxypropyl methacrylate-isobutyl acrylate-styrene copolymer, reaction products with carboxy-functional nanoparticles based on silicon-oxygen networks
 RL: IMF (Industrial manufacture); PEP (Physical, engineering or chemical process); PREP (Preparation); PROC (Process)
 (epoxy binders modified by nanoparticles for coatings)
 RN 313257-25-9 HCAPLUS
 CN 2-Propenoic acid, 2-methyl-, monoester with 1,2-propanediol, polymer with ethenylbenzene, 4-hydroxybutyl 2-propenoate and 2-methylpropyl 2-propenoate (9CI) (CA INDEX NAME)
 CM 1
 CRN 2478-10-6
 CMF C7 H12 O3



CM 2
 CRN 106-63-8
 CMF C7 H12 O2

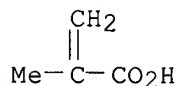


CM 3
 CRN 100-42-5
 CMF C8 H8



CM 4
 CRN 27813-02-1
 CMF C7 H12 O3
 CCI IDS
 CM 5
 CRN 79-41-4

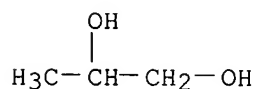
CMF C4 H6 O2



CM 6

CRN 57-55-6

CMF C3 H8 O2



RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Nippon Carbide Kogyo Kk	1996			JP 08199090 A	HCAPLUS
Ppg Industries Inc	1995			WO 9527012 A	HCAPLUS

L110 ANSWER 20 OF 40 HCAPLUS COPYRIGHT 2007 ACS on STN

AN 2000:68225 HCAPLUS

DN 132:109537

TI Aqueous pigmented ink jet inks for printing on hydrophobic substrates

IN Pearlstine, Kathryn Amy; Grezzo, Page Loretta Ann

PA E. I. Du Pont de Nemours & Co., USA

SO Eur. Pat. Appl., 16 pp.

CODEN: EPXXDW

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 974626	A1	20000126	EP 1999-110475	19990531 <--
	EP 974626	B1	20040519		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	US 6087416	A	20000711	US 1998-120922	19980722 <--
	CN 1242399	A	20000126	CN 1999-110527	19990722 <--
	JP 2000044858	A	20000215	JP 1999-208006	19990722 <--
PRAI	US 1998-120922	A	19980722	<--	

AB An ink jet ink composition suitable for use in printing directly to hydrophobic substrates comprises: (a) an aqueous vehicle containing at least water and a water-miscible solvent selected from the group consisting of glycols and glycol ethers, wherein water constitutes no more than 80% by weight based on the total weight of the vehicle; (b) an insol. colorant; (c) a polymeric dispersant; and (d) a surfactant selected from the group consisting of silicon surfactants and fluorinated surfactants. The ink optionally contains a graft copolymer binder having a hydrophobic backbone and non-ionic, hydrophilic side chains which is soluble in the aqueous vehicle but insol. in water. An ink contained a deprotected benzyl methacrylate-trimethylsilyl methacrylate block copolymer dispersant, diethylene glycol, Dowanol PnP, Byk-019, Silwet L7602, a binder, and

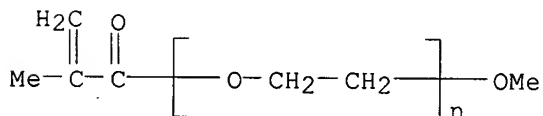
hexylene glycol.
 IC ICM C09D0011-00
 CC 42-12 (Coatings, Inks, and Related Products)
 IT 255829-08-4P
 RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM
 (Technical or engineered material use); PREP (Preparation); USES (Uses)
 (binder; aqueous pigmented ink jet inks for printing on hydrophobic
 substrates)
 IT 255829-08-4P
 RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM
 (Technical or engineered material use); PREP (Preparation); USES (Uses)
 (binder; aqueous pigmented ink jet inks for printing on hydrophobic
 substrates)
 RN 255829-08-4 HCAPLUS
 CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with ethenylbenzene and
 α -(2-methyl-1-oxo-2-propenyl)- ω -methoxypoly(oxy-1,2-
 ethanediyl), graft (9CI) (CA INDEX NAME)

CM 1

CRN 26915-72-0

CMF (C2 H4 O)_n C5 H8 O2

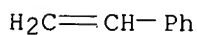
CCI PMS



CM 2

CRN 100-42-5

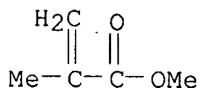
CMF C8 H8



CM 3

CRN 80-62-6

CMF C5 H8 O2



RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Du Pont	1992			DE 4218734 A	HCAPLUS
Seiko Epson Corp	1994			EP 0586101 A	HCAPLUS
Seiko Epson Corp	1994			EP 0606490 A	

L110 ANSWER 21 OF 40 HCAPLUS COPYRIGHT 2007 ACS on STN

AN 2000:68210 HCAPLUS

DN 132:108520

TI Water-insoluble nonionic graft copolymers

IN Grezzo, Page Loretta Ann; Pearlstine, Kathryn Amy; Waifong, Anton L.

PA E. I. Du Pont de Nemours & Co., USA

SO Eur. Pat. Appl., 10 pp.

CODEN: EPXXDW

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 974607	A1	20000126	EP 1999-110476	19990531 <--
	EP 974607	B1	20040929		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	US 7008992	B1	20060307	US 1998-120608	19980722 <--
	CN 1242378	A	20000126	CN 1999-110526	19990722 <--
	JP 2000072834	A	20000307	JP 1999-208005	19990722 <--
PRAI	US 1998-120608	A	19980722	<--	

AB A nonionic graft copolymer has a hydrophobic backbone and nonionic, hydrophilic side chains having a mol. weight of at least 500, preferably 100-2000 is substantially insol. in water, but soluble in an aqueous vehicle, and

is particularly suited for use in aqueous coating compns. in which water comprises no more than 80% by weight of the vehicle for the composition A copolymer was prepared from Bisomer S20W, Me methacrylate, and styrene.

IC ICM C08F0290-06

ICS C08F0290-04; C09D0151-00

CC 35-8 (Chemistry of Synthetic High Polymers)

Section cross-reference(s): 42

 IT 111740-55-7P 255722-59-9P **255829-08-4P**

RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (water-insol. nonionic graft copolymers)

 IT **255829-08-4P**

RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (water-insol. nonionic graft copolymers)

RN 255829-08-4 HCAPLUS

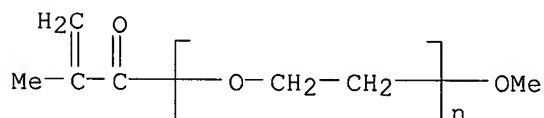
CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with ethenylbenzene and α -(2-methyl-1-oxo-2-propenyl)- ω -methoxypoly(oxy-1,2-ethanediyl), graft (9CI) (CA INDEX NAME)

CM 1

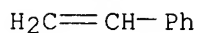
CRN 26915-72-0

 CMF (C2 H4 O)_n C5 H8 O2

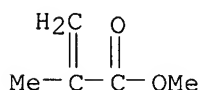
CCI PMS



CM 2

 CRN 100-42-5
 CMF C8 H8


CM 3

 CRN 80-62-6
 CMF C5 H8 O2


RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Anon	1992				HCAPLUS
Carrot, G		40	181	POLYMER BULLETIN	
Du Pont	1998			EP 0826751 A	HCAPLUS
Du Pont	1998			EP 0851014 A	HCAPLUS
Gakkaishi, S	1991	47	650		
Hiroshi, O				Preparation of copol	
Hiroyuki, S	1996			US 5480953 A	HCAPLUS
Kumar, L	1997			WO 9714448 A	HCAPLUS
Roehm Gmbh	1996			EP 0691355 A	HCAPLUS

L110 ANSWER 22 OF 40 HCAPLUS COPYRIGHT 2007 ACS on STN

AN 1999:21717 HCAPLUS

DN 130:96033

 TI Preparation of unsaturated polyoxyalkylene polyols in the presence of
 vinyl polymerization inhibitors

 IN Shen, Jianzhong; McDaniel, Kenneth G.; Hayes, John E.; Holeschovsky, Uli
 B.; Hinney, Harry R.

PA ARCO Chemical Technology, L.P., USA

SO U.S., 8 pp.

CODEN: USXXAM

DT Patent

LA English

FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 5854386	A	19981229	US 1997-918081	19970825 <--
	US 6034208	A	20000307	US 1998-74673	19980508 <--
	CA 2294359	A1	19990304	CA 1998-2294359	19980824 <--
	WO 9910407	A1	19990304	WO 1998-EP5363	19980824 <--
W:	AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW:	GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES,				

FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI,
 CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

AU 9893462	A	19990316	AU 1998-93462	19980824 <--
AU 742676	B2	20020110		
ZA 9807644	A	20000403	ZA 1998-7644	19980824 <--
EP 1012203	A1	20000628	EP 1998-946420	19980824 <--
EP 1012203	B1	20040721		

R: BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, NL, SE

BR 9813009	A	20000815	BR 1998-13009	19980824 <--
JP 2001514280	T	20010911	JP 2000-507728	19980824 <--
TW 515811	B	20030101	TW 1998-87113927	19980824 <--
ES 2224433	T3	20050301	ES 1998-946420	19980824 <--

PRAI US 1997-918081 A2 19970825 <--
 US 1998-74673 A 19980508 <--
 WO 1998-EP5363 W 19980824 <--

AB Unique, well defined polyethers containing both hydroxyl-functionality and unsatn.-functionality are prepared by oxyalkylating an unsatd. monomer having at least one oxyalkylatable hydrogen in the presence of an effective amount of a double metal cyanide complex catalyst and in the presence of a free radical polymerization inhibitor. The resulting polyethers are eminently suitable for such uses as polymer polyol stabilizers or stabilizer precursors, and both in situ and ex situ impact modifiers for thermoplastics.

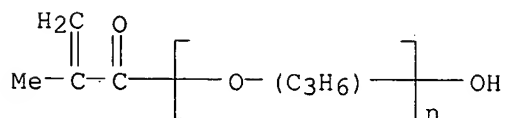
IC ICM C08G0059-00
 INCL 528403000
 CC 35-7 (Chemistry of Synthetic High Polymers)
 IT **111653-36-2P**
 RL: IMF (Industrial manufacture); PRP (Properties); PREP (Preparation) (preparation of unsatd. polyoxyalkylene polyols in the presence of vinyl polymerization inhibitors)

IT **111653-36-2P**
 RL: IMF (Industrial manufacture); PRP (Properties); PREP (Preparation) (preparation of unsatd. polyoxyalkylene polyols in the presence of vinyl polymerization inhibitors)

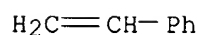
RN 111653-36-2 HCAPLUS
 CN Poly[oxy(methyl-1,2-ethanediyl)], α -(2-methyl-1-oxo-2-propenyl)- ω -hydroxy-, polymer with ethenylbenzene, graft (9CI) (CA INDEX NAME)

CM 1

CRN 39420-45-6
 CMF (C3 H6 O)_n C4 H6 O2
 CCI IDS, PMS



CM 2
 CRN 100-42-5
 CMF C8 H8



RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Anon	1992			JP 05209052 H	
Herold	1974			US 3829505	HCAPLUS
Kuyper	1984			US 4472560	HCAPLUS
Ramlow	1984			US 4454255	HCAPLUS
Simroth	1993			US 5196476	HCAPLUS

L110 ANSWER 23 OF 40 HCAPLUS COPYRIGHT 2007 ACS on STN

AN 1998:816477 HCAPLUS

DN 130:117359

TI Ink-jet printing receptor containing dye-receptive polymer and inorganic pigment

IN Mishima, Masayuki

PA Fuji Photo Film Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 17 pp.

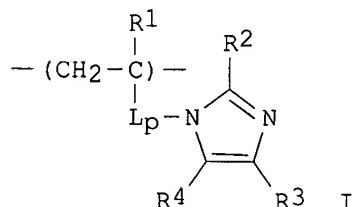
CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 10337948	A	19981222	JP 1997-151044	19970609 <--
	US 6183851	B1	20010206	US 1998-92947	19980608 <--
PRAI	JP 1997-151044	A	19970609	<--	
GI					



AB The title receptor comprises a support coated with a coating layer containing a dye-receptive polymer I (R1-4 = H or alkyl which may be branched; L = divalent linking group; p = 0 or 1) and ≥ 1 inorg. pigment. The medium shows high ink-drying rate and provides high quality images with good lightfastness.

IC ICM B41M0005-00

ICS B05D0005-04; B32B0027-00; D21H0019-36; C08F0020-34; C08F0020-60; C08F0026-06

CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

Section cross-reference(s): 38

IT 7631-86-9, Silica, uses 25232-42-2, 1-Vinylimidazole homopolymer 103437-05-4, 1-Vinylimidazole-1-vinyl-2-pyrrolidone-4-styrenesulfonic acid potassium salt copolymer 115218-48-9, 1-Vinylimidazole-polyethylene glycol methyl ether methacrylate copolymer 219590-19-9,

N-1-Imidazolylethyl acrylamide-polyethylene glycol methyl ether
acrylate-sodium methacrylate copolymer

RL: TEM (Technical or engineered material use); USES (Uses)
(ink-jet printing receptor containing dye-receptive polymer and inorg.
pigment)

IT 115218-48-9, 1-Vinylimidazole-polyethylene glycol methyl ether
methacrylate copolymer

RL: TEM (Technical or engineered material use); USES (Uses)
(ink-jet printing receptor containing dye-receptive polymer and inorg.
pigment)

RN 115218-48-9 HCAPLUS

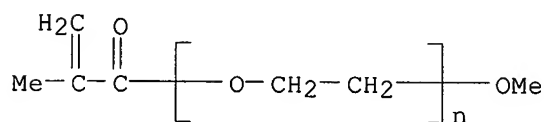
CN 1H-Imidazole, 1-ethenyl-, polymer with α -(2-methyl-1-oxo-2-propenyl)-
 ω -methoxypoly(oxy-1,2-ethanediyl) (9CI) (CA INDEX NAME)

CM 1

CRN 26915-72-0

CMF (C2 H4 O)_n C5 H8 O2

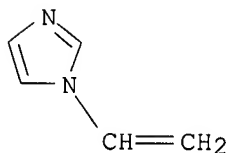
CCI PMS



CM 2

CRN 1072-63-5

CMF C5 H6 N2



L110 ANSWER 24 OF 40 HCAPLUS COPYRIGHT 2007 ACS on STN

AN 1998:161186 HCAPLUS

DN 128:193826

TI Two-component polyurethane acrylate binders for protective coatings

IN Melchior, Martin; Schwindt, Juergen; Ruttman, Gerhard; Hovestadt,
Wieland; Probst, Joachim; Pedain, Josef

PA Bayer A.-G., Germany

SO Ger. Offen., 10 pp.

CODEN: GWXXBX

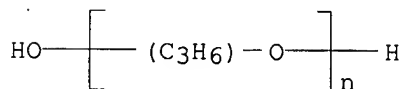
DT Patent

LA German

FAN.CNT 1

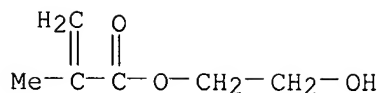
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PI	DE 19634076	A1	19980226	DE 1996-19634076	19960823 <--
	EP 825210	A2	19980225	EP 1997-114061	19970814 <--
	EP 825210	A3	19980304		

EP 825210 B1 20030827
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI
 US 6130285 A 20001010 US 1997-911510 19970814 <--
 AT 248198 T 20030915 AT 1997-114061 19970814 <--
 ES 2205099 T3 20040501 ES 1997-114061 19970814 <--
 CA 2213877 A1 19980223 CA 1997-2213877 19970819 <--
 JP 10101999 A 19980421 JP 1997-239153 19970821 <--
 NO 9703869 A 19980224 NO 1997-3869 19970822 <--
 NO 312971 B1 20020722
 PRAI DE 1996-19634076 A 19960823 <--
 AB The title binders, useful in solvent-free coatings for metals and inorg. substrates, comprise polyisocyanates and solvent-free polyols (OH group content 3-18%, viscosity 0.2-10 Pa-s at 23°) containing hydroxylated polyacrylates, ether-alcs., and, optionally, other alcs. A polyether acrylate (I) (OH content 11.1%, viscosity 1.11 Pa-s) was prepared by peroxide-initiated polymerization of a mixture of polypropylene glycol (mol. weight 437) 50.0, 2-ethylhexyl acrylate 15.9, styrene 6.1, and hydroxyethyl methacrylate 8.2 g. A mixture of I 100, HMDI-based biuret polyisocyanate (NCO content 23.0%, viscosity 2.75 Pa-s) 122, catalyst 0.1, and additives 10.4 g (NCO index 100), exposed as a 2-mm film at 50° for 3 days, had Shore D hardness 73, blister formation (0 least, 5 most) 0, and weathering (same scale) 3.
 IC ICM C09D0175-04
 ICS C09D0151-08; C08G0018-63; C08G0065-32; C08G0018-10; C08F0283-06; B05D0007-16; C23F0011-173
 ICA C08G0018-32; C08G0018-42; C08G0018-60; C08G0018-44; C08G0018-56; C08G0018-73; C08G0018-75; C08G0018-76; C08G0018-79
 ICI C08F0283-06, C08F0220-12, C08F0220-28
 CC 42-10 (Coatings, Inks, and Related Products)
 IT 203793-70-8 203793-71-9 203793-72-0 203793-73-1 **203793-74-2** 203793-75-3
 RL: TEM (Technical or engineered material use); USES (Uses)
 (two-component polyurethane acrylate binders for protective coatings)
 IT **203793-74-2**
 RL: TEM (Technical or engineered material use); USES (Uses)
 (two-component polyurethane acrylate binders for protective coatings)
 RN 203793-74-2 HCAPLUS
 CN 2-Propenoic acid, 2-methyl-, 2-hydroxyethyl ester, polymer with butyl 2-propenoate, ethenylbenzene and α -hydro- ω -hydroxypoly[oxy(methyl-1,2-ethanediyl)] (9CI) (CA INDEX NAME)
 CM 1
 CRN 25322-69-4
 CMF (C3 H6 O)_n H2 O
 CCI IDS, PMS



CM 2

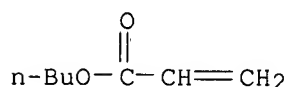
 CRN 868-77-9
 CMF C6 H10 O3



CM 3

CRN 141-32-2

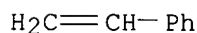
CMF C7 H12 O2



CM 4

CRN 100-42-5

CMF C8 H8



L110 ANSWER 25 OF 40 HCAPLUS COPYRIGHT 2007 ACS on STN

AN 1998:36706 HCAPLUS

DN 128:102773

TI Synthesis and Characterization of Colloidal Polypyrrole Particles Using Reactive Polymeric Stabilizers

AU Simmons, M. R.; Chaloner, P. A.; Armes, S. P.; Greaves, S. J.; Watts, J. F.

CS School of Chemistry Physics and Environmental Science, University of Sussex, Falmer / Brighton, BN1 9QJ, UK

SO Langmuir (1998), 14(3), 611-618

CODEN: LANGD5; ISSN: 0743-7463

PB American Chemical Society

DT Journal

LA English

AB The use of new "tailor-made" reactive statistical copolymers for the synthesis of sterically stabilized polypyrrole colloids is described. These copolymer stabilizers are readily prepared by free-radical copolymerization of (bi)thiophene-based vinylic monomers with various hydrophilic vinyl monomers such as 2-(dimethylamino)ethyl methacrylate, 2-vinylpyridine, N-vinylpyrrolidone or oligo(ethylene oxide) methacrylate. Monitoring the oxidation of the bithiophene graft sites using visible absorption spectroscopy provided evidence for stabilizer grafting. Relatively high stabilizer efficiencies were obtained and the resulting spherical polypyrrole particles contained 14 to 48% stabilizer by mass and had reasonably narrow size distributions in the 50-100 nm range. Pressed pellet conductivities were as high as 4 S cm⁻¹. XPS studies indicated that the polypyrrole particles were coated with an overlayer of grafted stabilizer, as expected from steric stabilization theory. This route to polypyrrole particles is believed to be completely general and is expected to allow the rational design of steric stabilizers containing a wide range of

functional comonomers. This should be useful for the improved design and performance of immunodiagnostic assays based on polypyrrole "marker" particles.

CC 37-3 (Plastics Manufacture and Processing)

Section cross-reference(s): 36, 76

IT **Conducting polymers**

Electric conductivity

Particle size

Sols

Stabilizing agents

(synthesis and characterization of colloidal polypyrrole particles using reactive polymeric stabilizers)

IT 201233-40-1P, 2-(Dimethylamino)ethyl methacrylate-2-vinylthiophene copolymer 201233-41-2P, 2-(Dimethylamino)ethyl methacrylate-3-vinylthiophene copolymer 201233-43-4P, 2-(Dimethylamino)ethyl methacrylate-5-vinyl-2,2'-bithiophene copolymer 201233-44-5P, 2-Vinylpyridine-2-vinylthiophene copolymer 201233-45-6P 201233-46-7P, 5-Vinyl-2,2'-bithiophene-2-vinylpyridine copolymer **201233-47-8P** **201233-48-9P** 201233-49-0P, N-Vinylpyrrolidone-3-vinylthiophene copolymer

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(reactive stabilizer; synthesis and characterization of colloidal polypyrrole particles using reactive polymeric stabilizers)

IT 201233-42-3P, 2-(Dimethylamino)ethyl methacrylate-pyridine-2-vinylthiophene graft copolymer 201233-50-3P, Pyridine-2-Vinylpyridine-2-vinylthiophene graft copolymer 201233-51-4P 201233-52-5P, Pyridine-5-Vinyl-2,2'-bithiophene-2-vinylpyridine graft copolymer **201233-53-6P** 201233-54-7P **201233-55-8P** 201233-56-9P, Pyridine-N-Vinylpyrrolidone-3-vinylthiophene graft copolymer 201233-57-0P, 2-(Dimethylamino)ethyl methacrylate-pyridine-3-vinylthiophene graft copolymer 201233-58-1P, 2-(Dimethylamino)ethyl methacrylate-pyridine-5-vinyl-2,2'-bithiophene graft copolymer 201233-59-2P, 2-(Dimethylamino)ethyl methacrylate-pyridine graft copolymer

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (synthesis and characterization of colloidal polypyrrole particles using reactive polymeric stabilizers)

IT **201233-47-8P 201233-48-9P**

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(reactive stabilizer; synthesis and characterization of colloidal polypyrrole particles using reactive polymeric stabilizers)

RN 201233-47-8 HCAPLUS

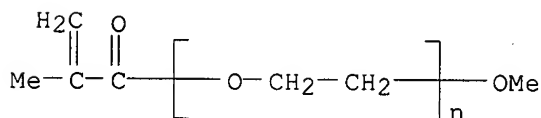
CN Poly(oxy-1,2-ethanediyl), α -(2-methyl-1-oxo-2-propenyl)- ω -methoxy-, polymer with 3-ethenylthiophene (9CI) (CA INDEX NAME)

CM 1

CRN 26915-72-0

CMF (C2 H4 O)n C5 H8 O2

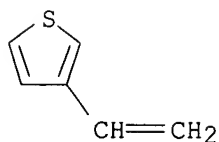
CCI PMS



CM 2

CRN 13679-64-6

CMF C6 H6 S



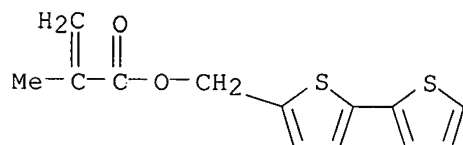
RN 201233-48-9 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, [2,2'-bithiophen]-5-ylmethyl ester, polymer with α -(2-methyl-1-oxo-2-propenyl)- ω -methoxypoly(oxy-1,2-ethanediyl) (9CI) (CA INDEX NAME)

CM 1

CRN 150376-02-6

CMF C13 H12 O2 S2

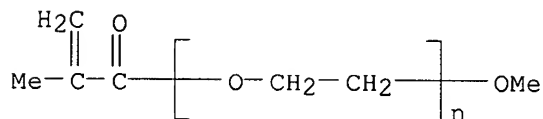


CM 2

CRN 26915-72-0

CMF (C2 H4 O)_n C5 H8 O2

CCI PMS



IT 201233-53-6P 201233-55-8P

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (synthesis and characterization of colloidal polypyrrole particles using reactive polymeric stabilizers)

RN 201233-53-6 HCAPLUS

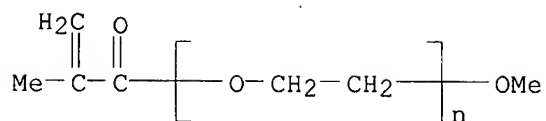
CN Pyridine, polymer with 3-ethenylthiophene and α -(2-methyl-1-oxo-2-propenyl)- ω -methoxypoly(oxy-1,2-ethanediyl), graft (9CI) (CA INDEX NAME)

CM 1

CRN 26915-72-0

CMF (C2 H4 O)_n C5 H8 O2

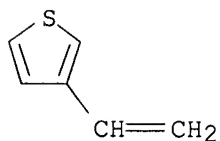
CCI PMS



CM 2

CRN 13679-64-6

CMF C6 H6 S



CM 3

CRN 110-86-1

CMF C5 H5 N



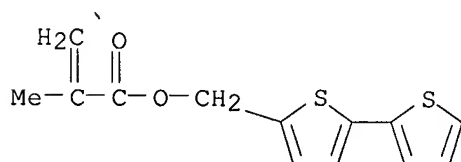
RN 201233-55-8 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, [2,2'-bithiophen]-5-ylmethyl ester, polymer with α -(2-methyl-1-oxo-2-propenyl)- ω -methoxypoly(oxy-1,2-ethanediyl) and pyridine, graft (9CI) (CA INDEX NAME)

CM 1

CRN 150376-02-6

CMF C13 H12 O2 S2

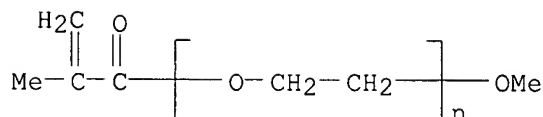


CM 2

CRN 26915-72-0

CMF (C2 H4 O)_n C5 H8 O2

CCI PMS



CM 3

CRN 110-86-1

CMF C5 H5 N



RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
=====	=====	=====	=====	=====	=====
Anon	1993	55-57		The Proceedings of t	
Arca, E	1994	35	334	Polym Prepr (Am Chem	HCAPLUS
Armes, S	1987		288	J Chem Soc, Chem Com	HCAPLUS
Armes, S	1989		88	J Chem Soc, Chem Com	HCAPLUS
Armes, S	1987	118	410	J Colloid Interface	HCAPLUS
Armes, S	1991	141	119	J Colloid Interface	HCAPLUS
Armes, S	1990	6	1745	Langmuir	HCAPLUS
Armes, S	1987			Ph D Thesis, Univers	
Armes, S	1990	31	569	Polymer	HCAPLUS
Armes, S	1989	28	837	Synth Met	
Armes, S	1990	37	137	Synth Met	HCAPLUS
Beadle, P	1993	34	1561	Polymer	HCAPLUS
Beaman, M	1993	271	70	Colloid Polym Sci	HCAPLUS
Bjorklund, R	1986		1293	J Chem Soc, Chem Com	HCAPLUS
Bjorklund, R	1987	83	1507	J Chem Soc, Faraday	HCAPLUS
Briggs, D	1993	1		Practical Surface An	
Cawdery, N	1988		1189	J Chem Soc, Chem Com	HCAPLUS
Dearmitt, C	1992	150	134	J Colloid Interface	HCAPLUS
Deslandes, Y	1993	9	1468	Langmuir	HCAPLUS
Digar, M	1992		18	J Chem Soc, Chem Com	HCAPLUS
Epron, F	1990	35/36	527	Makromol Chem, Macro	
Finzi, C	1992	25	245	Macromolecules	HCAPLUS
Gospodinova, N	1993	29	1305	Eur Polym J	HCAPLUS
Gospodinova, N	1992		923	J Chem Soc, Chem Com	HCAPLUS
Hallensleben, M	1995	196	3535	Macromol Chem Phys	HCAPLUS
Huglin, M	1991	192	2433	Makromol Chem	HCAPLUS
Kawaguchi, H	1993		294	Polymer Materials fo	
Khanna, R	1993	5	899	Chem Mater	HCAPLUS
Liang, Q	1992	28	755	Eur Polym J	HCAPLUS
Liu, C	1993	4	363	Polym J	
Liu, J	1991		1529	J Chem Soc, Chem Com	HCAPLUS
Lowe, A	1996		1555	Chem Commun	HCAPLUS
Maeda, S	1997	33	245	Europ Polym J	HCAPLUS
Monroy-Soto, V	1984	25	121	Polymer	HCAPLUS
Moss, B	1992	33	1902	Polymer	HCAPLUS
Napper, D	1983			Polymeric Stabilizat	
Odegard, R	1991	138	2930	J Electrochem Soc	

Peters, E	1991	29	1379	J Polym Sci, Polym C	HCAPLUS
Pope, M	1996	7	436	Bioconjugate Chem	HCAPLUS
Rawi, Z	1992	68	215	Colloids Surf	HCAPLUS
Simmons, M	1996			DPhil Thesis, Univer	
Simmons, M	1995	11	4222	Langmuir	HCAPLUS
Simmons, M	1996	37	2743	Polymer	HCAPLUS
Stanke, D	1995	72	89	Synth Met	HCAPLUS
Stejskal, J	1993	32	401	Polym Int	HCAPLUS
Tarcha, P	1992	22	347	Polymer Latexes:Prep	
Trumbo, D	1988	26	3127	J Polym Sci, Polym C	HCAPLUS
Trumbo, D	1991	29	603	J Polym Sci, Polym C	HCAPLUS
Trumbo, D	1988	19	217	Polym Bull	HCAPLUS
Vincent, B	1990		683	J Chem Soc, Chem Com	HCAPLUS
Waltman, R	1984	131	1452	J Electrochem Soc	HCAPLUS
Wei, Y	1993		1160	J Chem Soc, Chem Com	HCAPLUS
Wei, Y	1993		1160	J Chem Soc, Chem Com	HCAPLUS

L110 ANSWER 26 OF 40 HCAPLUS COPYRIGHT 2007 ACS on STN

AN 1997:632707 HCAPLUS

DN 127:263626

TI Process for the preparation of rigid polyurethane foam

IN Asako, Shinichi; Uchida, Hajime

PA Air Products and Chemicals, Inc., USA; Nippon Nyukazai Co. Ltd.

SO U.S., 6 pp., Cont. of U.S. Ser. No. 310,534, abandoned.

CODEN: USXXAM

DT Patent

LA English

FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 5668187	A	19970916	US 1996-646432	19960507 <--
PRAI	JP 1993-73679	A	19930331	<--	
	US 1994-310534	B1	19940922	<--	

AB In a process for the preparation of rigid polyurethane foam from a polyol and a polyisocyanate, it is possible to prepare rigid polyurethane foam by using an aqueous emulsion containing a polymer of ethylenically unsatd. monomers, whereby the amount of chlorofluorocarbon used can be decreased or eliminated. Using the aqueous polymer emulsion also alleviates the deterioration of phys. properties arising from the preparation of rigid polyurethane foam when water is used as a blowing agent.

IC ICM C08G0018-30

INCL 521137000

CC 37-6 (Plastics Manufacture and Processing)

IT 25085-19-2P, Acrylic acid-2-ethylhexyl acrylate-styrene copolymer
 25085-34-1P, Acrylic acid-styrene copolymer 25586-20-3P, Acrylic acid-butyl acrylate-styrene copolymer 26985-11-5P, Acrylic acid-butyl acrylate-2-hydroxyethyl methacrylate-styrene copolymer 78736-59-1P, Butyl acrylate-polyethylene glycol monomethacrylate copolymer 78736-61-5P, Polyethylene glycol monomethacrylate-styrene copolymer 131431-52-2P, Acrylic acid-butyl acrylate-polyethylene glycol monomethacrylate copolymer

RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PREP (Preparation); USES (Uses)

(preparation of rigid polyurethane foams using acrylic polymer emulsions as blowing agents)

IT 78736-61-5P, Polyethylene glycol monomethacrylate-styrene copolymer

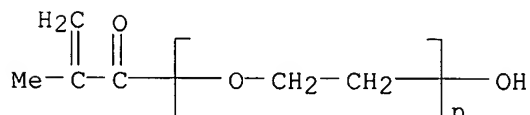
RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PREP (Preparation); USES (Uses)

(preparation of rigid polyurethane foams using acrylic polymer emulsions as

blowing agents)
 RN 78736-61-5 HCAPLUS
 CN Poly(oxy-1,2-ethanediyl), α -(2-methyl-1-oxo-2-propenyl)- ω -hydroxy-, polymer with ethenylbenzene (9CI) (CA INDEX NAME)

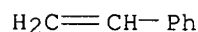
CM 1

CRN 25736-86-1
 CMF (C2 H4 O)_n C4 H6 O2
 CCI PMS



CM 2

CRN 100-42-5
 CMF C8 H8



L110 ANSWER 27 OF 40 HCAPLUS COPYRIGHT 2007 ACS on STN
 AN 1995:811087 HCAPLUS
 DN 124:9527
 TI Novel electroactive polymers and block copolymers
 AU Khan, I. M.
 CS Clark Atlanta Univ., GA, USA
 SO Report (1993), ARO-27141.7-CH-SM; Order No. AD-A276 119, 12 pp.
 Avail.: NTIS
 From: Gov. Rep. Announce. Index (U. S.) 1994, 94(12), Abstr. No. 433,268
 DT Report
 LA English
 AB Synthesis, characterization and properties of microphase separated mixed (ionic and electronic) conducting or MIEC block copolymers are reported. Poly(omega-methoxyocta(oxyethylene)methacrylate-block-4-vinylpyridine, abbreviated as PMG8-4VP, and poly-3-methylthiophene-block-omega-methoxyocta(oxyethylene)methacrylate, abbreviated as P(3MT-MG8), have been synthesized. Both block copolymer series may be appropriately doped to generate sep. electronic and ionic conducting microdomains in the overall solid matrix. Also, highly ionic conductive solid polymer **electrolytes** have been prepared by blending poly(ethylene oxide), poly(2- or 4-vinylpyridine) and LiClO₄. All blends were prepared by the solution blending process. Optimum blend compns. have been determined such that dimensionally stable elastomeric materials with ionic conductivities around 10⁻⁵ S cm⁻¹ at 25°C are obtained.
 CC 35-4 (Chemistry of Synthetic High Polymers)
 Section cross-reference(s): 36, 39, 76
 ST ionic electronic conducting solid polymer **electrolyte**
 IT **Electric conductivity and conduction**
 (ionic and electronic conducting solid polymer **electrolytes**)

IT **Electrolytes**
 (solid, ionic and electronic conducting solid polymer
electrolytes)

IT 25014-15-7, Poly(2-vinylpyridine) 25232-41-1, Poly(4-vinylpyridine)
 25322-68-3
 RL: POF (Polymer in formulation); PRP (Properties); USES (Uses)
 (doped; ionic and electronic conducting solid polymer
electrolytes)

IT **171274-17-2P** 171274-18-3P
 RL: POF (Polymer in formulation); PRP (Properties); SPN (Synthetic
 preparation); PREP (Preparation); USES (Uses)
 (doped; ionic and electronic conducting solid polymer
electrolytes)

IT **171274-17-2P**
 RL: POF (Polymer in formulation); PRP (Properties); SPN (Synthetic
 preparation); PREP (Preparation); USES (Uses)
 (doped; ionic and electronic conducting solid polymer
electrolytes)

RN 171274-17-2 HCAPLUS

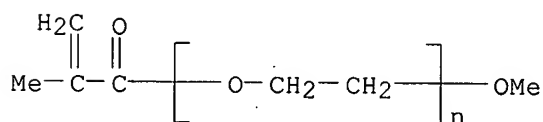
CN Pyridine, 4-ethenyl-, polymer with α -(2-methyl-1-oxo-2-propenyl)-
 ω -methoxypoly(oxy-1,2-ethanediyl), block (9CI) (CA INDEX NAME)

CM 1

CRN 26915-72-0

CMF (C2 H4 O)_n C5 H8 O2

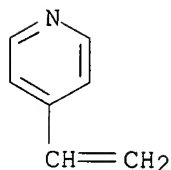
CCI PMS



CM 2

CRN 100-43-6

CMF C7 H7 N



L110 ANSWER 28 OF 40 HCAPLUS COPYRIGHT 2007 ACS on STN

AN 1993:496680 HCAPLUS

DN 119:96680

TI Influence of addition of **electrolyte** and/or increase of
 temperature on the viscoelastic properties of concentrated sterically
 stabilized polystyrene latex dispersions

AU Liang, W.; Tadros, T. F.; Luckham, P. F.

CS Jealott's Hill Res. Stn., ICI Agrochem., Bracknell/Berkshire, RG12 6EY, UK

SO Langmuir (1993), 9(8), 2077-83

CODEN: LANGD5; ISSN: 0743-7463

DT Journal

LA English

AB The viscoelastic properties of aqueous sterically stabilized polystyrene dispersions are investigated as a function of Na₂SO₄ concentration to establish the critical flocculation concentration (CFC) at 25°. The critical flocculation

temperature (CFT) was also determined from the temperature dependence of the rheol.

parameters at fixed Na₂SO₄ concentration The results showed that the dispersion

became significantly more pseudoplastic at and above the CFC and CFT.

Both the CFC and CFT were independent of the volume fraction of latex dispersions over the range studied (0.35-0.6). Below the CFC and CFT, the yield values and moduli showed a slight decrease with increase in

electrolyte concentration and temperature This was accounted for by the reduction

in the adsorbed layer thickness as the solvency of the medium for the chains was reduced. However, above the CFC and CFT all rheol. parameters showed a sharp increases with increase in both **electrolyte** concentration and temperature A scaling relation between yield value or

storage

modulus and volume fraction of latex particle was established, which demonstrated that a more open structure of flocs may be formed when the concentration of **electrolyte** at a given temperature or the temperature at a

given

concentration of **electrolyte** are well above the CFC or CFT. The elastic floc model was used to estimate the radius of the flocs above CFC as a function of particle volume fraction from the rheol. data. The results showed an increase in the floc radius with increase in volume fraction (ϕ_s) at a given Na₂SO₄ concentration At any ϕ_s , the floc radius also increases with an increase in Na₂SO₄ concentration

CC 36-5 (Physical Properties of Synthetic High Polymers)

ST viscoelasticity stabilized polystyrene **electrolyte** temp; sodium sulfate polystyrene dispersion viscoelasticity

IT Viscoelasticity

(of concentrated sterically stabilized polystyrene latex dispersions, effect of **electrolyte** and temperature on, critical flocculation concentration and temperature in relation to)

IT Flocculation

(of concentrated sterically stabilized polystyrene latex dispersions, effect of **electrolyte** and temperature on, viscoelastic properties in relation to)

IT Particle size

(of flocculated concentrated sterically stabilized polystyrene latex dispersions, effect of **electrolyte** and temperature on)

IT Law

(scaling, for viscoelasticity of concentrated sterically stabilized polystyrene latex dispersions, **electrolyte** and temperature effects in)

IT 7757-82-6, Sodium sulfate, properties

RL: PRP (Properties)

(**electrolytes**, viscoelastic properties of concentrated sterically stabilized polystyrene latex dispersions in presence of, critical flocculation concentration and temperature in relation to)

IT 115115-55-4

RL: PRP (Properties)

(latex dispersions, viscoelastic properties of concentrated, effect of **electrolyte** and temperature on, critical flocculation concentration and

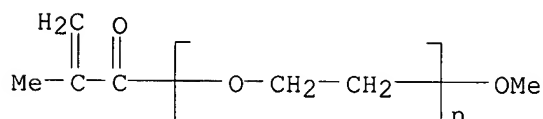
temperature

in relation to)
 IT 115115-55-4
 RL: PRP (Properties)
 (latex dispersions, viscoelastic properties of concentrated, effect of
electrolyte and temperature on, critical flocculation concentration and
 temperature

in relation to)
 RN 115115-55-4 HCAPLUS
 CN Poly(oxy-1,2-ethanediyl), α -(2-methyl-1-oxo-2-propenyl)- ω -
 methoxy-, polymer with ethenylbenzene, graft (9CI) (CA INDEX NAME)

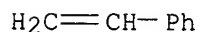
CM 1

CRN 26915-72-0
 CMF (C2 H4 O)_n C5 H8 O2
 CCI PMS



CM 2

CRN 100-42-5
 CMF C8 H8

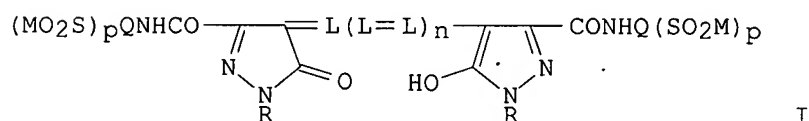


L110 ANSWER 29 OF 40 HCAPLUS COPYRIGHT 2007 ACS on STN
 AN 1992:521369 HCAPLUS
 DN 117:121369
 TI Silver halide photographic material
 IN Hirabayashi, Kazuhiko; Yoshida, Kazuhiro; Moriya, Tomonobu
 PA Konica Co., Japan
 SO Eur. Pat. Appl., 47 pp.
 CODEN: EPXXDW

DT **Patent**
 LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 462758	A2	19911227	EP 1991-305386	19910614 <--
	EP 462758	A3	19930224		
	R: DE, GB, IT, NL				
	JP 04051041	A	19920219	JP 1990-158929	19900618 <--
	US 5153113	A	19921006	US 1991-714495	19910613 <--
PRAI	JP 1990-158929	A	19900618	<--	
OS	MARPAT 117:121369				
GI					



I

AB A Ag halide photog. material having improved antistatic properties and reduced residue color after processing comprises a support, a Ag halide emulsion layer on a surface of the support, an antistatic layer comprising a water-soluble conductive layer, hydrophobic polymer particles, and an epoxy curing agent on the back surface of the support, and a hydrophilic colloid layer adjacent to the antistatic layer and containing a dye represented by the formula I (Q = an aliphatic or aromatic group; R = H or an aliphatic or

aromatic group; M = a cation; L = a methine group; n = an integer of 0-2; p = 1 or 2).

IC ICM G03C0001-83

ICS G03C0001-89

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

IT 9081-45-2

RL: USES (Uses)

(with hydrophilic colloid layers containing methine dyes and antistatic layers containing conductive polymers)

IT 9081-45-2

RL: USES (Uses)

(with hydrophilic colloid layers containing methine dyes and antistatic layers containing conductive polymers)

RN 9081-45-2 HCAPLUS

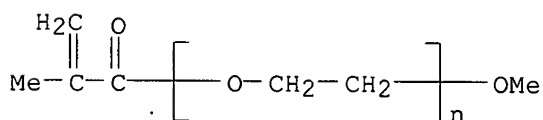
CN Poly(oxy-1,2-ethanediyl), α -(2-methyl-1-oxo-2-propenyl)- ω -methoxy-, polymer with ethenylbenzene (9CI) (CA INDEX NAME)

CM 1

CRN 26915-72-0

CMF (C2 H4 O)_n C5 H8 O2

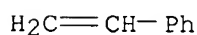
CCI PMS



CM 2

CRN 100-42-5

CMF C8 H8



L110 ANSWER 30 OF 40 HCAPLUS COPYRIGHT 2007 ACS on STN
AN 1992:436522 HCAPLUS

DN 117:36522
 TI Microencapsulated electrophotographic toner
 IN Pierce, Zona R.; Sorriero, Louis J.; Tyagi, Dinesh
 PA Eastman Kodak Co., USA
 SO U.S., 9 pp.
 CODEN: USXXAM
 DT Patent
 LA English
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 5049469	A	19910917	US 1989-457674	19891227 <--
	US 5162189	A	19921110	US 1991-723590	19910701 <--
PRAI	US 1989-457674	A3	19891227	<--	

AB A pressure-sensitive, heat-fusible, microencapsulated electrophotog. toner having uniform particle size and phys. characteristics and readily transferred from a photoreceptor to a toner image receiver comprises particles with an average diameter of 2-20 μ m and each having a core and a highly uniform enclosing shell, wherein the core comprises a colorant 0-20, a charge-controlling agent 0.05-5, and a thermoplastic polymer (melting temperature 40-150°, crystallization deg. 5-80%) 80-99.95 weight% and

the shell comprises colloidal-sized particles of a copolymer comprising an addition polymerizable nonionic oleophilic monomer 25-80, an addition polymerizable nonionic hydrophilic monomer 5-45, an addition polymerizable ionic monomer 1-50, and a crosslinking monomer containing ≥ 2 addition polymerizable groups 8-20 weight%. The copolymer functions as a stabilizer controlling the core size of the toner.

IC ICM G03G0009-093

INCL 430109000

CC 74-3 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

IT 126431-17-2, Ethylene dimethacrylate-2-hydroxyethyl methacrylate-methacrylic acid-styrene copolymer 142114-23-6, Ethylene glycol-2-hydroxyethyl methacrylate-methacrylic acid-styrene copolymer 142114-24-7, Ethylene glycol-2-hydroxyethyl methacrylate-styrene-4-vinylpyridine copolymer

RL: USES (Uses)

(outer layers containing, for microencapsulated electrophotog. toners)

IT 142114-23-6, Ethylene glycol-2-hydroxyethyl methacrylate-methacrylic acid-styrene copolymer 142114-24-7, Ethylene glycol-2-hydroxyethyl methacrylate-styrene-4-vinylpyridine copolymer

RL: USES (Uses)

(outer layers containing, for microencapsulated electrophotog. toners)

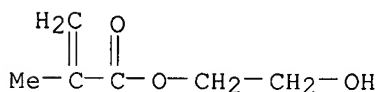
RN 142114-23-6 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with 1,2-ethanediol, ethenylbenzene and 2-hydroxyethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

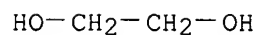
CRN 868-77-9

CMF C6 H10 O3



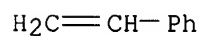
CM 2

CRN 107-21-1
CMF C2 H6 O2



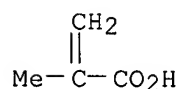
CM 3

CRN 100-42-5
CMF C8 H8



CM 4

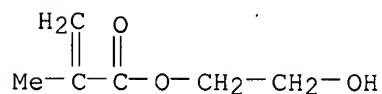
CRN 79-41-4
CMF C4 H6 O2



RN 142114-24-7 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 2-hydroxyethyl ester, polymer with
1,2-ethanediol, ethenylbenzene and 4-ethenylpyridine (9CI) (CA INDEX
NAME)

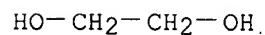
CM 1

CRN 868-77-9
CMF C6 H10 O3



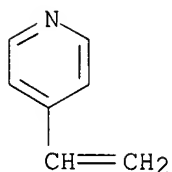
CM 2

CRN 107-21-1
CMF C2 H6 O2



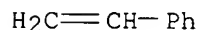
CM 3

CRN 100-43-6
CMF C7 H7 N



CM 4

CRN 100-42-5
CMF C8 H8



L110 ANSWER 31 OF 40 HCAPLUS COPYRIGHT 2007 ACS on STN

AN 1992:195868 HCAPLUS

DN 116:195868

TI Antistatic laminated plastic films

IN Ueda, Eiichi; Takada, Masahito

PA Konica Co., Japan

SO Eur. Pat. Appl., 53 pp.

CODEN: EPXXDW

DT **Patent**

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 466088	A2	19920115	EP 1991-111385	19910709 <--
	EP 466088	A3	19920603		
	R: DE, GB				
	JP 04068343	A	19920304	JP 1990-181852	19900710 <--
	US 5209985	A	19930511	US 1991-727062	19910708 <--
PRAI	JP 1990-181852	A	19900710	<--	

AB The title films, with good adhesion, comprise base films, layers of vinylidene chloride (I) polymers, and surface layers of ionic polymers. A biaxially-oriented polyester film was coated with 1.2 μm (dry basis) 0.3:11.1:2:86.6 acrylic acid-Et acrylate-itaconic acid-I copolymer, 1.0 μm (dry basis) latex of 1:4 maleic acid-Na 4-vinylbenzenesulfonate copolymer (mol. weight 5000) 70, 5:1:10:40:5 acrylic acid-Bu acrylate-Bu methacrylate-styrene-vinylamine copolymer 40, and a polyepoxide 12 g/L, and a gelatin layer to give a film with adhesion (1 best, 5 worst) after 1 min in H₂O at 40° 1.

IC ICM B32B0027-08

CC 38-3 (Plastics Fabrication and Uses)

Section cross-reference(s): 74

IT 26589-42-4 31514-57-5 54140-78-2 120543-34-2 **133417-84-2**

140715-43-1 140715-44-2

RL: USES (Uses)

(in antistatic plastic film laminates)

IT **133417-84-2**

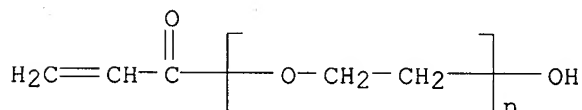
RL: USES (Uses)

(in antistatic plastic film laminates)

RN 133417-84-2 HCAPLUS
 CN Poly(oxy-1,2-ethanediyl), α -(1-oxo-2-propenyl)- ω -hydroxy-,
 polymer with ethenylbenzene (9CI) (CA INDEX NAME)

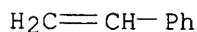
CM 1

CRN 26403-58-7
 CMF (C2 H4 O)_n C3 H4 O2
 CCI PMS



CM 2

CRN 100-42-5
 CMF C8 H8



L110 ANSWER 32 OF 40 HCAPLUS COPYRIGHT 2007 ACS on STN

AN 1992:174864 HCAPLUS

DN 116:174864

TI Preparation of microlatex dispersions using oil-in-water microemulsions

AU Larpent, C.; Tadros, T. F.

CS Dep. Chim. Org., Ec. Natl. Super. Chim. Rennes, Rennes, Fr.

SO Colloid and Polymer Science (1991), 269(11), 1171-83

CODEN: CPMSB6; ISSN: 0303-402X

DT Journal

LA English

AB The preparation of microlatex dispersions from microemulsions of a monomer (styrene, Me methacrylate, or vinyl acetate) is described. The microemulsion is prepared by forming a H2O-in-oil emulsion using a low-HLB surfactant (nonylphenol with 5, 6, or 7 mol ethylene oxide) and then titrating with an aqueous solution of a high-HLB surfactant (nonylphenol with

15 or 16 mol ethylene oxide). A small amount of anionic surfactant (Na lauryl sulfate, Na dodecyl benzene sulfonate, or dioctyl sulfosuccinate) is also incorporated to enhance the stability of the emulsion and facilitate the inversion to an oil-in-H2O microemulsion. The droplet-size distribution of the resulting microemulsion is determined using photon-correlation spectroscopy. Three different catalysts and 3 different polymerization methods are used: thermally induced polymerization using K2S2O8, azobis-2-Me propamidinium dichloride (I), or AIBN. All these initiators require heating to 60°, i.e. above the stability temperature of the microemulsion. In this case, the microlatexes produced are fairly large (37-100 nm diameter) and have a broad particle-size distribution. The 2nd polymerization procedure is chemical induced using a redox system of H2O2 and ascorbic acid. This produces microlatexes with small sizes (18-24 nm diameter) having a narrow-size distribution. The microlatex size is roughly 2-3 times the size of the microemulsion droplets. This shows that

collision between 2-3 microemulsion droplets results in their coalescence during the polymerization process. The 3rd method of polymerization is based on UV

irradiation in conjunction with K2S2O8, I or AIBN initiators. In this case, the microlatex is also small (30-63 nm) with a narrow particle-size distribution. Microlatex particles are also prepared using a mixture of monomers (styrene plus Me methacrylate) or mixture of monomers and methoxy (polyethylene glycol)methacrylate macromonomer. The nonionic latexes are very stable, giving no flocculation up to 6 mol dm⁻³ NaCl or CaCl₂ and critical flocculation concentration (CFC) of 0.6 mol dm⁻³ for Na₂SO₄ or MgSO₄. Charged latexes are less stable than the nonionic ones. The critical flocculation temps. (CFT) of all latexes are determined as a function of **electrolyte** concentration. With the nonionic latexes, CFC is higher than the θ -temperature for poly(ethylene oxide) at the given **electrolyte** concentration, indicating enhanced steric stabilization as a result of the dense packing of the chains and hence an elastic contribution to the steric interaction. This is not the case with the charged latex, which shows CFT values lower than the θ -temperature. The lattices containing methoxy poly(ethylene glycol) methacrylate are also less stable towards **electrolyte**.

CC 35-4 (Chemistry of Synthetic High Polymers)

IT 9003-20-7P, Poly(vinyl acetate) 9003-53-6P, Polystyrene 9011-14-7P, PMMA 9057-52-7P 25034-86-0P, Methyl methacrylate-styrene copolymer 37247-21-5P

RL: SPN (Synthetic preparation); PREP (Preparation)
(microlatexes, preparation and droplet size and stability of)

IT 37247-21-5P

RL: SPN (Synthetic preparation); PREP (Preparation)
(microlatexes, preparation and droplet size and stability of)

RN 37247-21-5 HCAPLUS

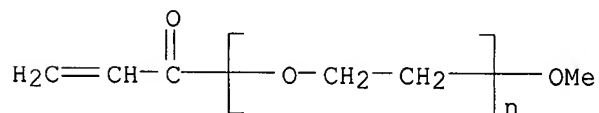
CN Poly(oxy-1,2-ethanediyl), α -(1-oxo-2-propenyl)- ω -methoxy-, polymer with ethenylbenzene (9CI) (CA INDEX NAME)

CM 1

CRN 32171-39-4

CMF (C₂ H₄ O)_n C₄ H₆ O₂

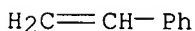
CCI PMS



CM 2

CRN 100-42-5

CMF C₈ H₈



L110 ANSWER 33 OF 40 HCAPLUS COPYRIGHT 2007 ACS on STN

AN 1992:162459 HCAPLUS

DN 116:162459

TI Silver halide photographic material having an antistatic backing layer containing an electroconductive polymer and a hydrophilic polymer

IN Yoshida, Kazuhiro

PA Konica Co., Japan

SO Jpn. Kokai Tokkyo Koho, 16 pp.

CODEN: JKXXAF

DT **Patent**

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 03241340	A	19911028	JP 1990-38977	19900220 <--
PRAI	JP 1990-38977		19900220 <--		

AB The photog. material has a layer containing (a) a water-soluble elec. conductive

polymer, (b) solid particles of hydrophilic polymer and (c) an epoxy-type hardening agent, and an adjacent hydrophilic colloid layer hardened by a triazine-type hardening agent. It has excellent anti-static property without inducing pinhole defects on developed images.

IC ICM G03C0001-89

ICS G03C0001-30

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

IT **Electric conductors, polymeric**

(antistatic photog. film containing)

IT **9081-45-2** 58048-89-8 66167-58-6

RL: USES (Uses)

(hydrophobic, antistatic photog. film containing)

IT **9081-45-2**

RL: USES (Uses)

(hydrophobic, antistatic photog. film containing)

RN 9081-45-2 HCAPLUS

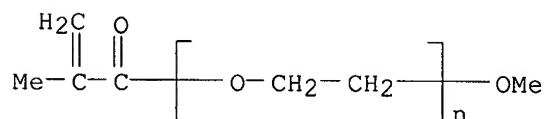
CN Poly(oxy-1,2-ethanediyl), α -(2-methyl-1-oxo-2-propenyl)- ω -methoxy-, polymer with ethenylbenzene (9CI) (CA INDEX NAME)

CM 1

CRN 26915-72-0

CMF (C2 H4 O)_n C5 H8 O2

CCI PMS



CM 2

CRN 100-42-5

CMF C8 H8



AN 1992:107447 HCAPLUS
 DN 116:107447
 TI Composite polymer microsphere manufacture
 IN Noda, Ippei; Abe, Masanobu; Sugiura, Fumitoshi
 PA Takemoto Oil and Fat Co., Ltd., Japan
 SO Jpn. Kokai Tokkyo Koho, 15 pp.
 CODEN: JKXXAF

DT Patent
 LA Japanese
 FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 03244637	A	19911031	JP 1990-42130	19900222 <--
	JP 2942298	B2	19990830		
	US 5296569	A	19940322	US 1993-46393	19930412 <--
PRAI	JP 1990-42130	A	19900222	<--	
	JP 1990-81986	A	19900329	<--	
	US 1991-655109	B2	19910214	<--	

AB Particles with average diameter (D) 0.05-30 μm , standard deviation (Ds) 1.0-2.5,

and aspect ratio (R) 1.0-1.2, useful as lubrication modifiers for polyester moldings, mold release agents, or antiblocking agents for plastic films, are mixts. of 3-70% vinyl polymers with no SiOH-reactive groups and 30-90% siloxanes bearing no radically-polymerizable groups. Thus, stirring a 2-phase aqueous solution of Si(OEt)₄, octamethyldichlorotetrasiloxane, MeSi(OMe)₃, and styrene for 5 h gave particles, heating of which in H₂O at 70° with K₂S₂O₈ for 4 h gave spheres with Da 1.1 μm , Ds 1.42, R 1.02, and siloxane content 86.3%.

IC ICM C08J0003-12

ICS C08L0043-04; C08L0083-04

CC 37-3 (Plastics Manufacture and Processing)

IT 9003-53-6P, Polystyrene 9003-70-7P, Divinylbenzene-styrene copolymer
 9011-14-7P, PMMA 78736-61-5P, Polyoxyethylene
 monomethacrylate-styrene copolymer

RL: PREP (Preparation)

(siloxane blends, microspheres, manufacture of)

IT 78736-61-5P, Polyoxyethylene monomethacrylate-styrene copolymer

RL: PREP (Preparation)

(siloxane blends, microspheres, manufacture of)

RN 78736-61-5 HCAPLUS

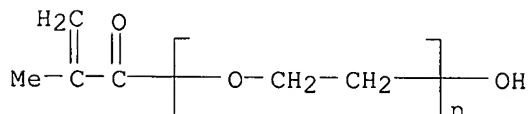
CN Poly(oxy-1,2-ethanediyl), α -(2-methyl-1-oxo-2-propenyl)- ω -hydroxy-, polymer with ethenylbenzene (9CI) (CA INDEX NAME)

CM 1

CRN 25736-86-1

CMF (C₂ H₄ O)_n C₄ H₆ O₂

CCI PMS



CM 2

CRN 100-42-5

CMF C8 H8

 $\text{H}_2\text{C}=\text{CH}-\text{Ph}$

L110 ANSWER 35 OF 40 HCAPLUS COPYRIGHT 2007 ACS on STN

AN 1991:418499 HCAPLUS

DN 115:18499

TI Antistatic layer

IN Tachibana, Noriki; Saito, Yoichi; Yamazaki, Toshiaki

PA Konica Co., Japan

SO Eur. Pat. Appl., 28 pp.

CODEN: EPXXDW

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 398223	A2	19901122	EP 1990-109055	19900514 <--
	EP 398223	A3	19910327		
	R: DE, GB, NL				
	JP 03067248	A	19910322	JP 1990-47018	19900227 <--
	JP 03067249	A	19910322	JP 1990-118276	19900508 <--
	US 5084339	A	19920128	US 1990-521591	19900510 <--
PRAI	JP 1989-122564	A	19890516	<--	

AB A plastic film, e.g., photog. film, with an antistatic layer is claimed where the antistatic layer is comprised of a H₂O-soluble electroconductive polymer, hydrophobic polymer particles, and a curing agent, and the hydrophobic polymer has a polyalkylene oxide chain. The film has excellent antistatic property. Thus, an antistatic layer was formed with a hydrophobic polymer from styrene-decaoxyethylene acrylate copolymer.

IC ICM G03C0001-85

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

 IT 120543-34-2 130341-38-7 133417-84-2 134119-91-8
 134247-85-1 134247-86-2 134247-87-3 134247-88-4
 134247-89-5 134289-46-6

RL: USES (Uses)

(antistatic layer containing, for photog. films)

IT 133417-84-2 134247-85-1 134247-86-2

RL: USES (Uses)

(antistatic layer containing, for photog. films)

RN 133417-84-2 HCAPLUS

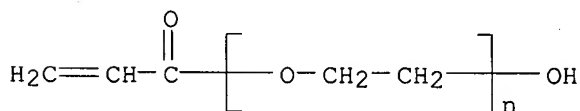
 CN Poly(oxy-1,2-ethanediyl), α -(1-oxo-2-propenyl)- ω -hydroxy-, polymer with ethenylbenzene (9CI) (CA INDEX NAME)

CM 1

CRN 26403-58-7

 CMF (C₂ H₄ O)_n C₃ H₄ O₂

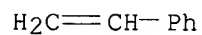
CCI PMS



CM 2

CRN 100-42-5

CMF C8 H8



RN 134247-85-1 HCAPLUS

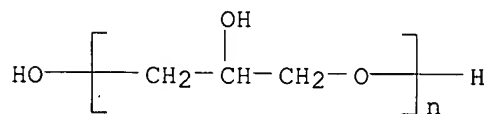
CN 2-Propenoic acid, polymer with butyl 2-propenoate, ethenylbenzene,
 α -hydro- ω -hydroxypoly(oxy-1,2-ethanediyl) and
 α -hydro- ω -hydroxypoly[oxy(2-hydroxy-1,3-propanediyl)] (9CI)
 (CA INDEX NAME)

CM 1

CRN 26403-55-4

CMF (C3 H6 O2)_n H2 O

CCI PMS

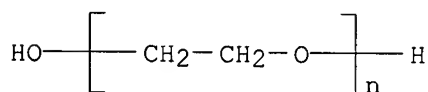


CM 2

CRN 25322-68-3

CMF (C2 H4 O)_n H2 O

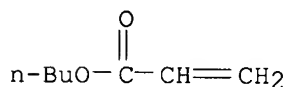
CCI PMS



CM 3

CRN 141-32-2

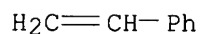
CMF C7 H12 O2



CM 4

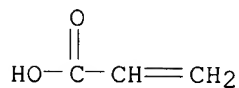
CRN 100-42-5

CMF C8 H8



CM 5

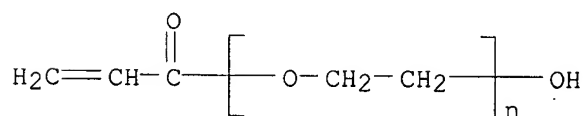
CRN 79-10-7
CMF C3 H4 O2



RN 134247-86-2 HCAPLUS
CN 2-Propenoic acid, butyl ester, polymer with ethenylbenzene and
 α -(1-oxo-2-propenyl)- ω -hydroxypoly(oxy-1,2-ethanediyl) (9CI)
(CA INDEX NAME)

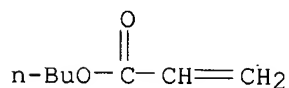
CM 1

CRN 26403-58-7
CMF (C2 H4 O)_n C3 H4 O2
CCI PMS



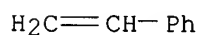
CM 2

CRN 141-32-2
CMF C7 H12 O2



CM 3

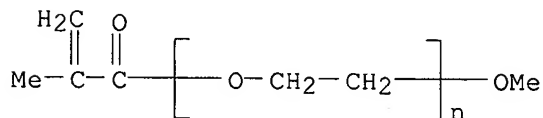
CRN 100-42-5
CMF C8 H8



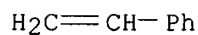
L110 ANSWER 36 OF 40 HCAPLUS COPYRIGHT 2007 ACS on STN
AN 1989:439977 HCAPLUS

jan delaval - 8 february 2007

DN 111:39977
 TI ABA triblock comb copolymers with oligo(oxyethylene) side chains as matrix for ion transport
 AU Khan, Ishrat M.; Fish, Daryle; Delaviz, Yadollah; Smid, Johannes
 CS Coll. Environ. Sci. Forestry, State Univ. New York, Syracuse, NY, 13210, USA
 SO Makromolekulare Chemie (1989), 190(5), 1069-78
 CODEN: MACEAK; ISSN: 0025-116X
 DT Journal
 LA English
 AB ABA triblock copolymers consisting of two terminal blocks (A) of comblike polymethacrylate with oligo(oxyethylene) (average d.p. 8) side chains and a middle block B of polystyrene were synthesized by anionic polymerization. The polymers were then solution cast from THF solns. of LiClO₄ and the homogeneous, solvent-free polymer **electrolyte** systems tested for their thermal characteristics (DSC) and conductivity. The inclusion of a polystyrene block in the comblike polymethacrylate **electrolyte** vastly improved their film-forming and mech. properties, but also lowered the conductivity. Addition of MeO(CH₂CH₂O)₄Me enhanced the ion conduction which could reach values of 10⁻⁴ Ω⁻¹·cm⁻¹ at 70°, depending on salt and styrene content.
 CC 35-4 (Chemistry of Synthetic High Polymers)
 Section cross-reference(s): 36
 IT 112119-04-7P 697284-07-4P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation and characterization of)
 IT 7439-93-2DP, Lithium, complexes with α-methacryloyl-ω-methoxypolyethylene glycol-styrene block graft copolymers
 112119-04-7DP, lithium complexes 121653-08-5DP, Me ether, lithium complexes 697284-07-4DP, lithium complexes
 RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
 (preparation and elec. conductivity of)
 IT 112119-04-7P 697284-07-4P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation and characterization of)
 RN 112119-04-7 HCAPLUS
 CN Poly(oxy-1,2-ethanediyl), α-(2-methyl-1-oxo-2-propenyl)-ω-methoxy-, polymer with ethenylbenzene, block (9CI) (CA INDEX NAME)
 CM 1
 CRN 26915-72-0
 CMF (C₂ H₄ O)_n C₅ H₈ O₂
 CCI PMS



CM 2
 CRN 100-42-5
 CMF C₈ H₈



RN 697284-07-4 HCAPLUS

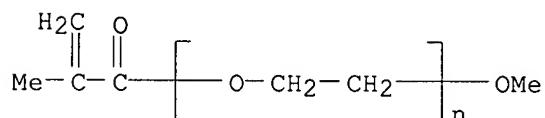
CN Poly(oxy-1,2-ethanediyl), α -(2-methyl-1-oxo-2-propenyl)- ω -methoxy-, polymer with ethenylbenzene, triblock (9CI) (CA INDEX NAME)

CM 1

CRN 26915-72-0

CMF (C2 H4 O)_n C5 H8 O2

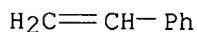
CCI PMS



CM 2

CRN 100-42-5

CMF C8 H8



IT 112119-04-7DP, lithium complexes 697284-07-4DP, lithium complexes

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (preparation and elec. conductivity of)

RN 112119-04-7 HCAPLUS

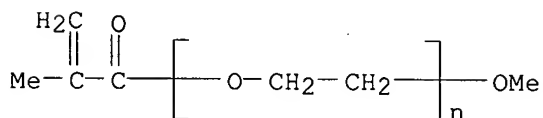
CN Poly(oxy-1,2-ethanediyl), α -(2-methyl-1-oxo-2-propenyl)- ω -methoxy-, polymer with ethenylbenzene, block (9CI) (CA INDEX NAME)

CM 1

CRN 26915-72-0

CMF (C2 H4 O)_n C5 H8 O2

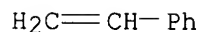
CCI PMS



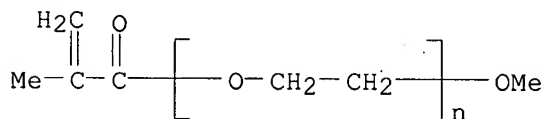
CM 2

CRN 100-42-5

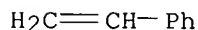
CMF C8 H8



RN 697284-07-4 HCAPLUS
 CN Poly(oxy-1,2-ethanediyl), α -(2-methyl-1-oxo-2-propenyl)- ω -methoxy-, polymer with ethenylbenzene, triblock (9CI) (CA INDEX NAME)
 CM 1
 CRN 26915-72-0
 CMF (C2 H4 O)_n C5 H8 O2
 CCI PMS



CM 2
 CRN 100-42-5
 CMF C8 H8

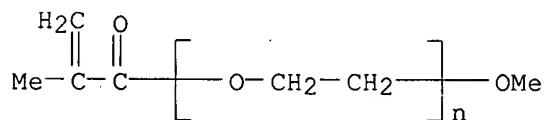


L110 ANSWER 37 OF 40 HCAPLUS COPYRIGHT 2007 ACS on STN
 AN 1988:473995 HCAPLUS
 DN 109:73995
 TI Nonionic polystyrene latexes in aqueous media
 AU Ottewill, Ronald H.; Satgurunathan, Rajasingham; Waite, Frederick A.; Westby, Margaret J.
 CS Sch. Chem., Univ. Bristol, Bristol, BS8 1TS, UK
 SO British Polymer Journal (1987), 19(5), 435-40
 CODEN: BPOJAB; ISSN: 0007-1641
 DT Journal
 LA English
 AB Colloidally stable nonionic polystyrene latexes were prepared in aqueous media, with a narrow distribution of particle sizes, using a nonylphenol polyethylene glycol condensate as the surface-active agent, methoxy polyethylene glycol methacrylate as the comonomer-stabilizer and ascorbic acid-H2O2 as the initiator system. These latexes were characterized using TEM, conductometric titration, and microelectrophoresis. The stability of the latexes to the addition of **electrolyte** was examined and also the stability to freeze-thaw conditions. The glass transition temps. of the latexes were also determined
 CC 35-4 (Chemistry of Synthetic High Polymers)
 Section cross-reference(s): 36
 IT **9081-45-2P**
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (latex, preparation and properties of)
 IT **9081-45-2P**
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (latex, preparation and properties of)

RN 9081-45-2 HCAPLUS
 CN Poly(oxy-1,2-ethanediyl), α -(2-methyl-1-oxo-2-propenyl)- ω -methoxy-, polymer with ethenylbenzene (9CI) (CA INDEX NAME)

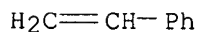
CM 1

CRN 26915-72-0
 CMF (C2 H4 O)_n C5 H8 O2
 CCI PMS



CM 2

CRN 100-42-5
 CMF C8 H8



L110 ANSWER 38 OF 40 HCAPLUS COPYRIGHT 2007 ACS on STN

AN 1988:446030 HCAPLUS

DN 109:46030

TI Polymer mordants for color photographic elements

IN Shibata, Takeshi; Hirano, Tsumoru

PA Fuji Photo Film Co., Ltd., Japan

SO Ger. Offen., 28 pp.

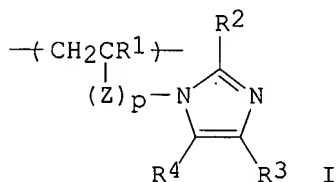
CODEN: GWXXBX

DT **Patent**

LA German

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI	DE 3712900	A1	19871029	DE 1987-3712900	19870415 <--
	JP 62244043	A	19871024	JP 1986-87180	19860417 <--
	JP 06082211	B	19941019		
	JP 62244036	A	19871024	JP 1986-87181	19860417 <--
	JP 06095197	B	19941124		
	US 4774162	A	19880927	US 1987-39561	19870417 <--
PRAI	JP 1986-87180	A	19860417	<--	
	JP 1986-87181	A	19860417	<--	
GI					



AB Polymer mordants for use in color photog. materials contg repeating units of the formula I (R1-R4 = H, alkyl; Z = divalent group; p = 0 or 1) along with repeating units from other ethylenically unsatd. compds. The polymer mordants produce layers that have decreased brittleness and decreased tendency to crack. Thus, a dye-fixing sheet was prepared by coating a polyethylene-laminated paper support with a layer containing a tetraethylene glycol Me ether methacrylate-1-vinylimidazole copolymer, gelatin, and guanidine picolinate and a layer containing gelatin and a hardening agent. This sheet was then combined with an exposed heat-developable diffusion-transfer color photog. element and processed to produce a stable image that was resistant to crack formation.

IC ICM G03C0001-06

ICS G03C0007-26; G03C0007-18; C08L0039-04

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

IT 115218-39-8P 115218-41-2P 115218-42-3P **115218-48-9P**

RL: PREP (Preparation)

(preparation of, as mordant for heat-developable color diffusion-transfer photog. material)

IT **115218-48-9P**

RL: PREP (Preparation)

(preparation of, as mordant for heat-developable color diffusion-transfer photog. material)

RN 115218-48-9 HCAPLUS

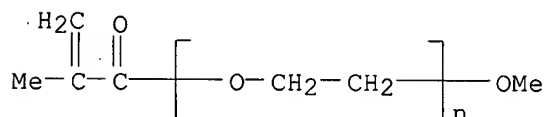
CN 1H-Imidazole, 1-ethenyl-, polymer with α -(2-methyl-1-oxo-2-propenyl)- ω -methoxypoly(oxy-1,2-ethanediyl) (9CI) (CA INDEX NAME)

CM 1

CRN 26915-72-0

CMF (C2 H4 O)_n C5 H8 O2

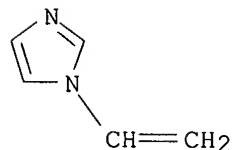
CCI PMS



CM 2

CRN 1072-63-5

CMF C5 H6 N2



DN 105:181484
 TI Toner compositions containing complex ionophoric polymeric materials
 IN Smith, Thomas W.; Teegarden, David M.; McGrane, Kathleen M.; Luca, David J.
 PA Xerox Corp. , USA
 SO U.S., 14 pp.
 CODEN: USXXAM

DT Patent
 LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 4592989	A	19860603	US 1985-722975	19850412 <--
	JP 61239250	A	19861024	JP 1986-77520	19860403 <--
	JP 06100845	B	19941212		
	EP 198663	A1	19861022	EP 1986-302633	19860409 <--
	EP 198663	B1	19900808		
	R: BE, FR, GB, IT				
	ES 553869	A1	19871216	ES 1986-553869	19860410 <--
	CA 1269560	A1	19900529	CA 1986-506279	19860410 <--
PRAI	US 1985-722975	A	19850412	<--	

AB An electrostatic toner composition comprises resin particles, pigment particles, and a complex of a dipolar mol. or salt attached to an ionophoric polymer. Thus, styrene-ethylene oxide block copolymer (I) of mol. weight 13,200-20,300 was prepared Then, a toner composition was prepared by melt blending 84 weight% STYRON 686 with 6 weight% Regal 330 C black and 10 weight% of I complexes with 15 weight% of KSCN based on oxyethylene-content of I. A pos. triboelec. charge of >30 $\mu\text{C/g}$ was achieved with this toner.

IC ICM G03G0009-00
 ICS G03G0009-08

INCL 430110000

CC 74-3 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

IT 109-99-9DP, derivs., polymers 37247-21-5P

RL: PREP (Preparation)

(preparation of, for electrostatic toner composition)

IT 37247-21-5P

RL: PREP (Preparation)

(preparation of, for electrostatic toner composition)

RN 37247-21-5 HCAPLUS

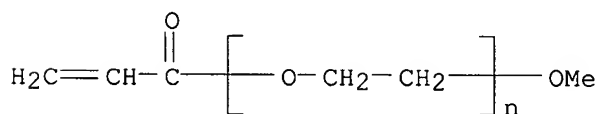
CN Poly(oxy-1,2-ethanediyl), α -(1-oxo-2-propenyl)- ω -methoxy-, polymer with ethenylbenzene (9CI) (CA INDEX NAME)

CM 1

CRN 32171-39-4

CMF (C2 H4 O)_n C4 H6 O2

CCI PMS



CM 2

CRN 100-42-5
CMF C8 H8

$H_2C=CH-Ph$

L110 ANSWER 40 OF 40 HCAPLUS COPYRIGHT 2007 ACS on STN

AN 1985:549357 HCAPLUS

DN 103:149357

TI Resin compositions containing rare-earth compounds for neutron shielding

PA Mitsubishi Rayon Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 6 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 60099150	A	19850603	JP 1984-218744	19841019 <--
	US 4563494	A	19860107	US 1983-548444	19831103 <--
PRAI	US 1983-548444	A	19831103	<--	
	JP 1982-195800	A	19821108	<--	
	JP 1982-195801	A	19821108	<--	
	JP 1982-195802	A	19821108	<--	

AB Transparent compns. having excellent shielding properties for thermal n comprise transparent thermoplastic and/or thermosetting resins and Gd, Sm, and/or Eu compds. Thus, a mixture of Gd nitrate 3, 2-hydroxyethyl methacrylate 17, propylene glycol 2, styrene 78, 2,2'-azobis(2,4-dimethylvaleronitrile) 0.1, and Na dioctyl sulfosuccinate was poured into a mold, which was immersed in hot water at 65° for 4 h and heated at 120° for 120 min to give a 3-mm transparent plate with light transmittance 91%, thermal n-absorbing cross section 2400 cm², and flexural strength 720 kg/cm².

IC ICM C08L0025-04

ICS C08F0002-44; G02B0001-04

CC 71-4 (Nuclear Technology)

Section cross-reference(s): 38

IT 9003-53-6 9010-92-8 25034-86-0 26010-51-5 92232-25-2

98473-90-6 98473-91-7 98473-92-8

RL: PROC (Process)

(containing gadolinium, samarium and/or europium compds., transparent, for shielding of thermal neutron)

IT 98473-90-6

RL: PROC (Process)

(containing gadolinium, samarium and/or europium compds., transparent, for shielding of thermal neutron)

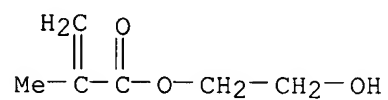
RN 98473-90-6 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-hydroxyethyl ester, polymer with ethenylbenzene and 1,2-propanediol (9CI) (CA INDEX NAME)

CM 1

CRN 868-77-9

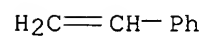
CMF C6 H10 O3



CM 2

CRN 100-42-5

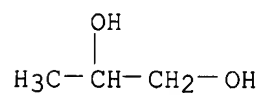
CMF C8 H8



CM 3

CRN 57-55-6

CMF C3 H8 O2



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